Now, the People!

Revolution in the 21st Century

Jean-Luc Mélenchon

Founder of La France insoumise
and the leader of the French left

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Revolution in the Twenty-First Century

Jean-Luc Mélenchon

Translated by David Broder

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Foreword

by David Broder

‘We are going to nationalise time.’ Jean-Luc Mélenchon wasn’t making the kind of policy promise that we usually hear in the final days before a parliamentary election. If the France insoumise founder might have been expected to use his last campaign stops to take selfies with candidates and flatter their credentials as local MPs, he seemed eager to raise the political stakes a little. At a rally in Toulouse, he spoke of how capitalist modernity upends our lifestyles and even our sense of time itself. ‘Capital’, he said, ‘constantly works to dominate the long term by its grip on the short term.’ It stretches out our waking hours and wrings each second out of us to ‘accumulate vast fortunes’, sowing chaos in the cycles of the natural world and grinding down human existence. But Mélenchon also told his listeners of a different economic model: one ‘that strives to harmonise the rhythms of production with the rhythms of nature and of human life’.[1] This had to do with immediate policy issues like the fight against Emmanuel Macron’s pension reform, making French people work deep into their sixties. Mélenchon called for a wider vision of change. He called for an ‘extraordinary nationalisation’: to impose collective control on not just production but the tempo of economic life. This meant a system of ‘environmental planning, to repair the world, not to loot it’.

Such rhetoric reaches loftier heights than most electoral politics, in France or elsewhere. Mélenchon's campaign innovations, such as appearing as a hologram at multiple simultaneous rallies, sometimes have a spark of inspiration hard to imagine even (or especially) in the political cultures geographically closest to France. But if Mélenchon uses the soaring tones of an earlier generation of popular tribunes, beneath this is a cannier, more theorised political approach: what he calls the slow advance of a 'shrewd tortoise'.[2] This is, in part, a matter of tactical lessons learned since he quit the Parti Socialiste and embarked on an independent course in 2008. Since then, Mélenchon has fought three presidential campaigns, becoming among Europe's best-established left-wing leaders and reaching 22 per cent support in the most recent presidential contest in 2022. If commonly attributed to an international 'left-populist' wave which briefly crested in the post–Great Recession period, the France insoumise movement has shown real political resilience. It rose from seventeen MPs in 2017 to seventy-five in 2022. In the summer 2024 snap elections (winning seventy-two seats), it was the largest force in the broad-left alliance Nouveau Front Populaire (NFP), which resisted Marine Le Pen's far-right Rassemblement National and, to general surprise, became the largest bloc in parliament.

Appearing before an enraptured Place Stalingrad as run-off results came in on the night of 7 July 2024, Mélenchon told supporters that the left in other countries would be looking to France to find out how to win. But what generalisable lessons were there? Doubtless, many shared the 'immense relief' of which Mélenchon spoke after the result, cheered by both the unity on the left and the setback for Le Pen's party, which had been widely expected to win the election. Media and government efforts to blacken Mélenchon's name in the manner of Britain's Jeremy Corbyn had again been thwarted, both by La France insoumise's hardiness and by the millions who turned out to vote for it despite the now-familiar accusations of extremism and sympathy for 'enemies of the West'. But the specific

experience of La France insoumise often seems under-examined abroad, especially in the Anglophone world, with a dearth of histories or in-depth studies. The present book by its founder is certainly not a cross-section of that movement or of its immediate agenda. But to better understand the political context to which this book relates, the theory it outlines, and the role of both in shaping La France insoumise, it is worth explaining this movement's origins and the political battles that it has waged. That, at any rate, is the focus of this introduction.

Resisting forever

I first met Jean-Luc Mélenchon in my role as a translator in 2018. He had come to Liverpool to visit the Labour conference, meet the party's then-leader Jeremy Corbyn and address Momentum's The World Transformed event. Not just a new departure in my professional life – my first experience of live interpreting, in which I gamely sought to translate Mélenchon's rhetorical presence as well as his words – our few hours together offered a chance to discuss the changing face of the left. I interviewed him for *Tribune* magazine, addressing the relationship between La France insoumise and the left in Britain and beyond. Mélenchon pointed to an important contradiction in the 'new' left-wing forces. The enthusiasm behind such parties as Corbyn's Labour was surely owed to the political exhaustion of the neoliberalised centre-left and the 'disarray' that resulted. Yet even younger activists like us, Mélenchon said, often harkened back to an old model of social democracy, taking up 'the vocabulary and the ideas of the twentieth century in the reality of the twenty-first'.[3] Mélenchon, politically active since the 1970s, counted himself among those activists who had passed on the baton: they had been 'resisting forever' but now

found that their ‘resistance was connecting with the aspirations of younger generations’.[4]

In this early moment of its existence, La France insoumise tended to distance itself from the label ‘left wing’, with its chosen name (‘France in Revolt’)[5] dispensing with the explicit mention of class or socialism. It deemed the word ‘left’ too associated with the disasters of President François Hollande, who had in the mid-2010s dismantled major labour protections and cravenly implemented austerity. Moreover, while La France insoumise has long championed workplace struggles and social movements based in them, it is not an organised presence in the trade-union movement and indeed tends to relativise the traditional socialist idea of the working class as the central actor in transforming society. It instead fused recently coined labels like the ‘99 per cent’ with a French-republican argot of ‘the people’. This connection between historical reference points and an organisational model departing from twentieth-century norms is typical of La France insoumise, even when it does build bridges with other left-wing parties. The creation of a ‘New’ Popular Front in the run-up to the 2024 snap elections clearly harked back to the antifascism of the 1930s. Yet, even given the Confédération Générale du Travail (CGT) union’s support for its candidates, the NFP was much less a product of structured mass parties than the Popular Front of old.

To understand La France insoumise’s relationship to left-wing tradition, it is worth considering Mélenchon’s record in the Parti Socialiste, his break from its ranks and deeper processes that have recomposed the political left in recent decades. Mélenchon has surely been an important witness to these changes. He was born in Tangiers, in today’s Morocco, in 1951; of Spanish and Sicilian descent, he moved to France when he was eleven, in 1962. He became politically active during his philosophy studies, joining the Organisational Communiste Internationaliste, a Trotskyist group led by Pierre Lambert, in 1972. The period following May ‘68, which opened up a

breach in the Parti Communiste Français's hegemony in the mass labour movement, accelerated the rise of Trotskyist and Maoist dissidents but also a rising hegemon on the left in the form of François Mitterrand's Parti Socialiste, founded at the turn of the 1970s. Mitterrand's party soon formed a pact with the Communists, the ever-unsteady Union of the Left, which set out a 'Common Programme' for government. In 1976, Mélenchon, during this period a local journalist, joined the Parti Socialiste. For the next decade, he was associated with Mitterrand's wing of the party: Mélenchon supported his successful bid for the presidency in 1981, in which Mitterrand promised a 'rupture' with capitalism based on the Socialist–Communist coalition.

Mitterrand was the Fifth Republic's first left-wing president and raised many hopes. His investiture ceremony at the Panthéon celebrated his election as, more than just a change of government, the culmination of the promise of the French revolutionary tradition.[6] Yet the idea of 'rupture', taking large sectors of the economy into public hands, soon faced many challenges, from capital flight to the pressure to curtail spending in line with the demands of the European Monetary System. In 1983, the Socialist government declared a 'parenthesis' which – Prime Minister Pierre Mauroy insisted – was meant as a 'temporary' letting up of reformist zeal rather than an abandonment of a 'left-wing policy agenda'.[7] Yet, in Mélenchon's words, the 'parenthesis was never closed', and, in fact, in 1988, the Parti Socialiste fought and won Mitterrand's second presidential campaign on a markedly less ambitious programme.[8] If France had no abrupt Thatcherite turn, the political sands were shifting. Already during the first term, Jean-Marie Le Pen's Front National – aided by Mitterrand's introduction of a more proportional electoral system – made its mark, electing a cohort of thirty-five MPs in the 1986 parliamentary elections, which saw the Socialists defeated.

Mélenchon, who became a senator in 1986, remained within the Mitterrandian wing of the party, and later drew a nuanced account of the left's record in government. While surely – he noted in an address on the fortieth anniversary of Mitterrand's election – this was a 'revolution suspended', it had considerable reformist achievements. These included reforms undone by later governments, like retirement at age sixty and the tax on big fortunes, and permanent changes like removing the criminal offense of homosexuality and abolishing the death penalty.[9] Still, there was also a longer-term struggle for the party, in particular owing to the eclipse of Mitterrand's initial promises by the so-called 'Second Left' headed by Michel Rocard. Having often conflict-ridden relations with the president, including during Rocard's spell as prime minister from 1988–91, this current had initially emerged from a libertarian-hued 'self-managementist' critique of the Jacobin and Marxist traditions, but pushed against the 'all-powerful state' and in favour of a liberalised centre-left hooked on the unification of European capitalism. While Mélenchon, like other Socialists, supported the signing of the Maastricht Treaty in 1992,[10] the single market and currency soon became a point of conflict within the French left. It increasingly counted in his own critique of social-democratic conformism to market dictates.

In this sense, the referendum on the European Constitutional Treaty in 2005 was pivotal. Mélenchon had been a junior minister from 2000–2, holding the brief for vocational education in a Socialist-led government during the turn-of-the-millennium *cohabitation* with Jacques Chirac.[11] But the party was riven by contradictions over the European project, and, in particular, the role of the proposed Constitution in enforcing 'liberalisations' of member states' public services and labour markets. Not only the left wing of the party, but also an important section of its right wing headed by Laurent Fabius, opposed ratification in the vote among Parti Socialiste members, which was eventually won for the 'Yes' side. In

the 2005 referendum campaign, the official line of both the Socialists and the Gaullist party was to support the European Constitution, but a substantial minority of Socialist dissidents as well as the Communists and most of the radical left backed ‘No’. Even more surprisingly, the ‘No’ side won the national referendum, rejecting the Constitution by an almost 10 per cent margin. Yet the dominant parties managed to stifle the popular decision, and a mildly retouched version of the document was pushed through parliament in 2008, without again consulting the electorate.[12]

The ever-shallower democratic content of the European project added to voter dissatisfaction with the main parties of government and led to a reordering of the left. Mélenchon was throughout the 1990s a leading figure in Gauche Socialiste, a small current on the left wing of the Parti Socialiste, and then another current called Nouveau Monde, but, in 2004, headed in a more plural direction by founding the association Pour la République Sociale. Apart from its titular focus on the ‘social republic’, Pour la République Sociale rallied left-wing opponents of the European Constitutional Treaty, including Communists, environmentalists, and some (post-)Trotskyist forces. In this same period, this latter wing of the far left had made itself felt during the alter-globalisation movement and mass struggles against liberalising job-market reforms like the Contrat première embauche (2006), and it repeatedly scored over a million votes at election time. But the foundation of a Nouveau Parti Anticapitaliste during the late 2000s, if initially attracting a considerable militant core, entered into the trench warfare of far-left groups and failed to rally a broader swathe of French society. Instead, the Parti de Gauche co-founded by Mélenchon in 2009, in a ‘Left Front’ with the Communists and smaller allies, became the major electoral force to the left of the Parti Socialiste.

While his party’s name left no doubt as to its political inclinations, Mélenchon was not always recognised as a champion of the left. In the post-crisis period, the term ‘populist’ instead gained media currency as a

catch-all term for political outsiders, deftly avoiding contact with questions of policy substance or ideological positioning. This day-today use by pundits, often at odds with scholarly definitions of populism (and hence ignoring the demagogic political style of figures like Emmanuel Macron) has had two notable applications in France.[13] One is to demonise critics of all but the most dogmatic adherence to neoliberal assumptions and the US Democrats' idea of the world order. The 'populist' Mélenchon is thus cast as part of a ragbag of illegitimate forces, perhaps even more dangerous than Marine Le Pen, with whom he is routinely equated.[14] Still, the charge of 'populism' also serves as a way of soft-pedalling criticism of what was once called the 'far right', which is only too happy to be cast as the defender of 'the little people' against elite groupthink. Mélenchon has at times defied critics by embracing the term. As he put it in one 2010 interview: 'I don't want to defend myself anymore against the accusation of populism. People are disgusted by the elites … I'm calling upon the energies of the many against the arrogance of the privileged classes. Am I a populist? Yes!'[15]

Constituent process

Mélenchon's account of the failures of the left differs from many radicals who cast the early Mitterrand years as the moment when the Parti Socialiste abandoned its historical mission and commitment to blue-collar France. Having left the party in the moment of the financial crisis, Mélenchon's interventions increasingly spoke of a historical exhaustion of social democracy and its vision of harnessing capitalism for social ends.[16] In the early post-2008 period – in France experienced under a right-wing government – the Parti Socialiste was not yet at its electoral nadir and outwardly claimed to be more than an enforcer of neoliberal diktats. In the

primaries before the 2012 presidential race, François Hollande insisted on his left-wing credentials – declaring ‘my real enemy is the world of finance’ – and promised to oppose austerity. Yet, after defeating conservative Nicolas Sarkozy to take the presidency, Hollande became an austerian hawk, imposing cuts in public services, indulging in bog-standard fawning over the ‘business community’, and supporting the fiscal waterboarding of more recalcitrant EU member states. West African rebels were dealt with by military means. Among the signal measures of his nominally Socialist government was the 2016 labour law, known as the Loi El-Khomri, which slashed job protections in the name of driving labour-market demand.

So unpopular was Hollande by the end of his first and only term – also marked by a state of emergency responding to the Bataclan attacks of 13 November 2015 – that he became France’s first president to decide against seeking re-election. Many of his allies, not to mention the big hitters of corporate France, soon swung behind his economy minister, Emmanuel Macron, and his astroturfed campaign promising to ally ‘both left and right’. Mélenchon had in his first presidential bid in 2012 scored 11 per cent of the vote – the highest vote for a candidate to the left of the Parti Socialiste in over three decades – and was in a strong position to rally an alternative. The creation of La France insoumise in early 2016 expressed what was widely cast as an attempt to create a French force akin to Spain’s Podemos, rivalling the centre-left in the name of a trampled-upon democracy and revived politics of solidarity. If comparisons could be made with the left-wing insurgencies in the US Democratic Party and Britain’s Labour Party, the obvious distinction was La France insoumise’s independent identity and strong counterposition to the neoliberalised centre left, not even forming alliances with it for the sake of town-hall coalition building.

In this sense, it did more than refound social democracy. In La France insoumise’s analysis, the social-democratic left appeared not so much

pushed into difficulty by a contingent and exogeneous ‘crisis’ beginning in 2007–8, but rather as a historically exhausted force wedded to a failed model of capitalist growth. Indeed, if the comparison with figures like Jeremy Corbyn – and La France insoumise’s obvious interest in appealing to disillusioned and betrayed Parti Socialiste voters – might suggest a kind of recapturing of the original promise of social democracy, this idea deserves some qualification. If elements of Mélenchon’s political make-up were informed by the Mitterrandian tradition, and he evoked founders of this party such as Jean Jaurès, these influences were significantly reworked through both international experience and a reckoning with the new stakes of political struggle in the twenty-first century, notably looking beyond the European context. In *Now, The People!* we see this, in particular, in the effort to tie an earlier history of popular struggle – the lessons of the French Revolution – to ‘citizens’ revolutions’ from Latin America to West Africa and indeed the Arab Spring of the early 2010s.

As explained in Chapter 11, this vision of republicanism emphasises not just redistribution, concern for marginal groups, or generous welfarism, but an enlivened democracy. To echo E. P. Thompson, we could say that this ‘people’ is ‘present at its own making’, as through conscious action it creates a shared identity, purpose and basis for its collective life. This revolution relies on what Mélenchon terms as a series of three phases: the ‘destituent’, the ‘instituent’ and the ‘constituent’. The most familiar of these terms, ‘constituent’, as in ‘constituent assembly’, points to the meaning of the other two: a citizens’ revolution will tear down the unsustainable, previously existing order (in a ‘destituent’ phase), establish the people as a political actor that recognises its shared interests (‘instituent’) and then, in a ‘constituent’ process, create the new institutions that allow a massive deepening of participatory democracy. Although La France insoumise is most often compared to European left-populist forces, these ideas draw greatly on the Latin American experiences of the 2000s, notably the

citizens' revolution in Ecuador and Rafael Correa's presidency, and at least the early phases of the Bolivarian Revolution in Venezuela. Mélenchon, who has a keen interest in the continent, has often cited the Latin American left as a key influence, albeit insisting there are no models 'exportable just as they are'.[17]

Indeed, the relevance of this approach also lies in its connection to social struggles in France, especially insofar as these have become divorced from notionally left-wing parties often seen as alien or even (as in the case of Hollande's Parti Socialiste) on the opposite side. Notable in *Now, The People!* is the author's enthusiasm for the Gilets Jaunes movement which began in late 2018, a multifaceted and decentralised social movement which shared few of the codes of the traditional left or trade unionism.[18] This was partly because, as Mélenchon explains, the focus of the initial demand – opposition to a fuel tax hike – concerned not the workplace per se but rather the transport on which people rely, and immediately raised directly political stakes. If often the uniform of otherwise 'invisible' logistics workers and usually low-wage service jobs, the hi-vis jackets from which the movement took its name are, quite simply, an item that anyone would have in their car. For Mélenchon, the gathering of such disparate protestors on occupied roundabouts, with the hi-vis and the tricolour as its favoured symbols, shows the spontaneous coming together of a diffuse 'people' which becomes such precisely because it recognises itself in a shared demand.

In this vision, La France insoumise appears as a tool for generalising these learning processes, through its programme of citizens' revolution. This means creating structures in which democracy can flourish, through a constituent process that would abolish the current 'presidential monarchy' and create an assembly – elected and/or chosen by lot – which would write a new constitution. La France insoumise calls this the fight for a Sixth Republic, to replace the current order created by General Charles de Gaulle during France's failed colonial war in Algeria. Both the circumstances of

the Fifth Republic's creation – the eventual product of a military coup – and the overweening presidency that has resulted are the focus of sharp critique by La France insoumise, in this sense finding a rich seam of argument throughout the period of Macron's rule. Despite his initial 'liberal' trappings, he has both secured power through historically low levels of voter enthusiasm and turnout and abused monocratic powers to push through obviously unpopular measures. His appointment of conservative Michel Barnier as prime minister in September 2024 ignored wholesale the results of the summer's parliamentary elections, in which the president's supporters and the centre-right in general lost seats.

The easiest way to prompt constitutional change would be to capture the presidency – and this has led to a certain tension, if not an outright contradiction, between La France insoumise's ambition of decentralising power and its close identification with its repeat presidential candidate. Mélenchon is often painted as the perennial 'leader' of the movement he co-founded, and he is cast as an *éminence grise* by some centre-left figures who rail against 'his' (or better, La France insoumise's) policy imprint on coalitions like NFP. The accusation of leader-centrism being a unique feature of La France insoumise is, in any case, jarring in a polity so fixated on the presidency that the current incumbent's supporters call themselves 'Macronists' and claim no party identity, programme or intellectual tradition of reference, and in which the Parti Socialiste list for the 2024 elections to the European Parliament was headed by an 'independent' who is not a party member but is widely seen as a future presidential contender. La France insoumise has the notable distinction that its activity pursues a clear and collectively drawn programme, with the document prepared for the 2017 presidential election, *L'Avenir en Commun*, later complemented by more expansive policy booklets and the broad-left manifestoes it helped inform in the 2022 and 2024 parliamentary elections.

From its creation in 2016, La France insoumise's quest for a political break with the establishment centre-left also led to a rejection of the party model as such.[19] From the outset, it conspicuously focused on the idea that it was a 'movement', even if one that routinely stood in elections, rather than a structured political party. This has often drawn comparisons with Spain's Podemos and even Italy's Five Star Movement (a force with markedly less connection to the intellectual or organisational traditions of the left), each of which similarly did without party membership, congresses, organised currents and other such traditional expressions of mass parties' internal democratic life. This is what Mélenchon has literally called a 'gaseous' (or, we might say, 'distributed') form, bearing comparison with ideas like the 'swarm' that gathers for sporadic actions, including even electoral contests, rather than a formalised party structure. Still, while it does not have the depth of member structures of the old workers' parties, notably built around their presence in local government, it is also clear that La France insoumise has undergone considerable organisational development through its existence.

For evidence, we can look to a variety of structures designed to give La France insoumise greater depth – from its action groups to the creation of a permanent on-the-ground presence, especially in localities where it has elected officials. While the French political map today shows a marked difference between town-hall politics (where the old Socialist and Gaullist parties remain stronger) and more volatile presidential elections, La France insoumise can hardly be accused of focusing on these latter elections alone, not least given its truly vast parliamentary work.[20] Organs such as the Parliament of the People's Union – a structure created alongside Mélenchon's 2022 presidential bid, which brought together 400 activists, experts and intellectuals – and the Institut La Boétie, of which Mélenchon has been president since leaving parliament in 2022, attest to its programmatic development on everything from energy policy to the

capitalist colonisation of outer space. As historian Roger Martelli notes, this reflects a distinctive trait of La France insoumise's culture: Mélenchon's 'real desire to give an intellectual underpinning to his political action contrasts with other left-wing leaders, where this dimension has all but disappeared'.[21]

The 'people' in question

But who is this 'people' of which *Now, the People!* and its forebear *L'Ère du Peuple* speak? It is surely not 'everyone' or human beings as such, even if its political action serves the interests of the majority. Still, it would be a little inaccurate to qualify *le peuple* in translation by using terms like 'working' people, importing through the back door a Marxist or Labourite association between the workplace and a collectivist political identity. The distinct French term *les classes populaires* includes this 'working people' while also extending beyond the properly industrial workforce; it implies a division of society into classes with rival interests. The choice of the word 'the people' has a similar dimension of conflict but is also somehow distinct from 'popular classes': it appears both broader, more to do with the creation of a new global order, and more rooted in a vocabulary of humanity's existence as a species in harmony and sometimes disharmony with nature. It has a classed dimension insofar as it excludes oligarchic minorities: it bears comparison to David Graeber's famous formulation of the 99 per cent against the 1 per cent. It is rooted in a republican conception of the collective democratic mobilisation, rooted in the traditions of 1789 and 1793.

La France insoumise often refers to its social base in these terms. For instance, on the night of the 2022 presidential election, in which Mélenchon scored 22 per cent of the vote – narrowly edged out by Le Pen to make the

run-off – he insisted that the resistance to the next president would rely on the real conquest of recent struggles, an ‘immense popular force that you [supporters] have built’. La France insoumise representatives often cite the analysis of Bruno Amable and Stefano Palombarini, which holds that Macron’s support amounts to a ‘bourgeois bloc’ spanning the middle and upper classes of formerly centre-left and centre-right political affiliations.[22] Yet this is not, at least yet, countered by a single alternative ‘popular bloc’, the opposition instead being made up of the ‘national-sovereigntist’ camp led by Le Pen’s party, especially successful in lower-income areas (albeit including more middle-income voters)[23] in small-town France; the ‘popular-left-wing’ bloc is also stronger in low-income areas, but generally more urban ones.[24] In moments like the Gilets Jaunes struggle, it has sought to extend beyond the cities and highlight common ‘popular’ demands, for instance the extension of public services.

Some superficial accounts read this republican idea of the common interest as a call for a ‘national’ solidarity. In both liberal and some left-wing media, La France insoumise’s use of tricolour flags and the singing of the *Marseillaise* at its rallies are often painted as sure markers of its nationalism. This clashes bizarrely with its dominant portrayal in most of the media-political sphere in France, in which La France insoumise is routinely cast by both Macronist ministers and far-right scandal sheets as an ‘Islamo-leftist’ and ‘Muslim-communalist’ force whose alleged pandering to ethno-religious sectarianism, simply by recognising the reality of Islamophobia, risks tearing apart the Republic’s foundations. Here, Mélenchon’s mentions of Jacobin and revolutionary tradition become not proof of the movement’s roots in France’s history so much as evidence of a dastardly totalitarian spirit, shared with the enemies of the West. What these rival attempts to demonise it share, across their different political intentions, is a tendency to consider Frenchness as both static and exclusive. La France insoumise’s discourse on the ‘people’ and – connected to this – its French

republicanism is, however, markedly directed towards the idea of a malleable identity built on universalist premises. This is well-illustrated by a key idea in the conclusion to this book: creolisation.

The term was coined by the Martinican poet Édouard Glissant in specific reference to the world of cultural production.[25] Creolisation is about the creole – most literally the creation, by slaves, of an original and fused language in the French-colonised Caribbean. In Glissant's vision, this is a more or less spontaneous process of the coming together of human groups; or, as Mélenchon writes on p. 273 of this book, the 'preparation of a common matrix to build from'. As against the idea of 'integration' or 'assimilation' into a static French culture, it provides 'the missing link between the desire for universalism and the assertion of the right to be different'. In *Now, the People!* we learn that the 'people' is not just a sum of individuals incidentally amassed in one place, but a population which, brought together by shared conditions of existence, becomes conscious of this fact, and lays the basis of its democratic life. In Mélenchon's republican project, the principles of the French Revolution, or at least its heights, set out universalist premises which remain to be realised in practice through the free association of human beings. The French republicanism upheld by La France insoumise is precisely this vision of a continually recreated civic community, open to all cultural influences but within a shared egalitarian and democratic framework.

Able to cite revolutionary precedents like the Senegalese-born Jean-Baptiste Belley – a former slave who became a member of the National Convention in 1793 – this defence of an open idea of Frenchness is more than just a beautiful narrative of the past. It is an urgent response to the increasing obsession with national identity – and its alleged subversion – in today's France. The rampant spread of ideas of migrant invasion and Muslim takeover, like the 'Great Replacement Theory' – coined by conspiracy theorist Renaud Camus, spread by reactionary pundits like Éric

Zemmour and taken up by establishment Gaullist politicians – is just one example of this. If even a Macronist interior minister can accuse Le Pen of going ‘soft on Islam’, and even figures on the centre-left refer to almost any politicisation of anti-racism as evidence of minority groups’ dangerous ‘communalism’, then, clearly, the Republic is not at ease with all its members. The police murder of seventeen-year-old Nahel Merzouk in 2023, and La France insoumise’s stout insistence on painting the response in the oppressed suburbs as a ‘revolt’ against injustice rather than blind ‘violence’, illustrated its defence of what remain France’s second-class citizens: the populations labelled the ‘products of immigration’ even if their parents were born in France.

As we were putting the final touches to this translation, Emmanuel Macron appointed a conservative government that pinned all its hopes of survival (short-lived as they were) on Le Pen’s favour, and which promised to ‘restore order’ on immigration even at the cost of questioning the rule of law.[26] On such evidence, it may seem that the ‘republican front’ in today’s France is more directed against Jean-Luc Mélenchon than against the grandchildren of Vichy. But though it has been written off many times, La France insoumise is betting that things do not have to be this way. It insists that republican and revolutionary inheritance is not just a powerful memory, but revitalised in the present by popular struggles, offering the real hope that France is not consigned to slide towards the far right. More than just resisting reactionary enemies, in *Now, the People!* the France insoumise founder theorises why today’s increasingly urbanised populations – tied together by the same supply chains, rail lines and fibreoptic cables – have a material basis to join their forces and confront the common threats to their conditions of existence. In his words, the militants of La France insoumise set themselves the small task of changing the history of the world, with the mass of humanity at their side.

Introduction: The Sound and the Fury of a New Era

Throughout history, France has often given the starkest expression to the trends running through a given era – sometimes even to the point of caricature. The major turning points in contemporary history have often played out theatrically on the great stage of French public life. Social transformations that seemed less dramatic in other climes can take on a quite remarkable aspect in France. The passing of the centuries has built up the nation's abundant repertoire of moments of change and rupture and the memory of the great waves of popular emotions that went with them. This connection between historical events and our collective memory was born with the Republic itself.

In Goethe's words, the modern era began with the French Revolution of 1789. The poet himself was present at the Battle of Valmy, where he witnessed the defeat of the first European feudal coalition against the French popular battalions. There, the people defeated a professional army who had come to subjugate them to what everywhere else remained the established order. The First Republic was proclaimed immediately afterwards. The whole of Europe was pitched into a frenzy, along with South America and the Caribbean. Yet just four years before that, the court of King Louis XVI had been engaged in a heated debate about the limits of

the free (grain) market in the kingdom's economy, subject to the fragmentation of feudal duties. This was the central economic question of this period of change. It pitted two successive prime ministers, Turgot and Necker, against each other. There was nothing academic about the question posed. What economic and fiscal model could help pay off the kingdom's colossal debts, at a time when the richest, living off feudal stipends and privileges, refused to contribute to the common good? Neither Necker nor Turgot succeeded in finding such a model, despite their best efforts. So it took the people bursting onto the stage of history to finally put an end to civil and clerical feudalism.

And yet, the people did not do this in the name of some economic theory. Their objective was to make a declaration of human beings' fundamental rights a reality. Hence, this was also the political culmination of four centuries of growing humanism, clarified and broadened in scope by a century of Enlightenment philosophy. France's revolutions are always just as much a source of (and a result of) great intellectual inspiration as a political, social or economic turning point.

In France, capitalism first gained a legal footing in 1804 with the status granted in the Civil Code to the first investment companies, then in 1867 when joint-stock companies were opened up to anyone with capital to invest. The theory to engage with this new stage in history was written in French by Karl Marx and Friedrich Engels. As early as 1871, Marx credited the French insurrectionaries who created the Paris Commune with finding 'the political form at last discovered' of the dictatorship of the proletariat.[1]

Since then, every transition in the mode of production, however great or miserable, has been experienced in France in the form of major political upheavals. This has often meant spectacular convulsions, embodied in faces and symbols so powerful that they soon made their way around the world. In recent years, the Gilets Jaunes stood out as the embodiment of revolt by

the people in developed societies who had been brought to their knees by globalisation.

Today, the political rise of the France insoumise movement is being closely observed, often with great sympathy, by the radical left across Europe and Latin America. It is also being watched in a number of countries in Africa and Asia, where contacts are also being made. This is quite a new development after these last three decades and is itself a sign of the times. The interest in La France insoumise comes from a variety of political currents, but they all represent resistance to the destructive consequences of internationalised and globalised capitalism. This book will also show how our movement has drawn great inspiration from these different experiences of resistance. This is a break with the European tradition of pretension and arrogant condescension towards the rest of the world. Latin America, the Maghreb and sub-Saharan Africa, as well as many Asian countries, have all nourished my analyses of the forms of 'citizens' revolution'.

A fresh eruption

Today, France is again seeing eruptions that the world often looks at with some amazement. How did we go from the radiant young president Emmanuel Macron to the brutal autocrat who denied the results of the snap elections which he himself had called? How can he suddenly seem as incongruous as the oddball storming the US Capitol Building in his horned furry hat? What happened? Before his first election in 2017, Macron published his programme in a book entitled *Révolution*, which called for the neoliberal transformation of France. He has partly achieved it. To that end, he eviscerated the country itself. He got rid of the strategic, organising state and cast off the public services that pool the costs of its population's

essential needs. This has meant seven years of destroying schools and health services, which were previously taken as models of efficiency around the world. A series of social movements immediately followed, spectacular both in their strength and political richness. Seen from afar, only the most intense phases of activity are visible. But, when we look at them more closely, they herald a new season in our history. Nor will these struggles remain a purely French affair. The battles being fought in Paris are about the same crucial issues which are at play across the world. The cultures, rites and traditions that are being crushed under the barbaric steamroller of neoliberalism are giving rise to a powerful force of popular rebellion.

This book is my contribution to these movements of resistance, wherever they may be in today's globalised world. It puts forwards a political theory. Yes, we need to understand fully, before we move to act. Without such a tool, we can only act blindly. Without this understanding, we cannot learn from past experience, and it will be impossible to set a political agenda. But we can do better than just trial and error. We *must* do better than that, if we want to succeed.

A theory for action

This theory shows how and why we have entered what I call the 'age of the people' and its 'citizens' revolutions'. My starting point is the new material foundations underlying human civilisation. These are, indeed, new in several regards: the world population has doubled twice in the space of a century, urbanisation has spread almost everywhere and the capitalist mode of production has been transformed. All this means that the mechanisms of ecological crisis and climate change play a central role in accelerating the course of history. This vision shows the illegitimacy of not only capitalism,

but of all the political parties founded on the productivist model of endless growth. These parties have brought human civilisation to a dead end.

We are now seeing a historically novel social conflict. After the battle of bourgeois and proletarians, we now have a battle between ‘them and us’, with two key players: the oligarchy and the people. This book presents the people as the new revolutionary actor in our contemporary history. It defines the people within the intellectual tradition of historical materialism. It sets the people within the new social relations of today’s globalised civilisation: the age of the collective networks that enable and organise our entire existence.

The table of contents of this book shows the many avenues that my analysis takes. I have delved into several new territories for critical political thinking. My aim in all this is not just to describe the current impasse but to suggest how we might find our way out of it. Still, this is not a programme in the sense of an electoral manifesto. That exists elsewhere – it has been put to the popular vote, in France attracting nearly 8 million votes under the title *L’avenir en commun*, ‘Our Common Future’. This book is a historical programme in the broad sense of setting out a different avenue for human civilisation itself. It is about overcoming the ecological and social impasse through a citizens’ revolution. This is how we will save human civilisation from collapsing under the weight of climate change.

I do not see political theory as a dogma to which reality must be made to conform. No: it is a way to think coherently about the facts we have in front of us, so that we can then shape their future development. The point is to be able to act. Thus, such a theory must also constantly pass the test of experience. This applies both to checking whether events confirm our predictions and to seeing whether the tactics proposed on that basis actually work. I have constantly put my own efforts to such tests, through dialogue, reading, observing the world around me and in political action itself. This experience also included three presidential election campaigns. This was

useful not only for fine-tuning the proposals put to voters, but also for setting and testing our campaign tactics. All this took me from 3.5 per cent in the polls in 2011 to a 22 per cent score in the 2022 presidential election. Our credibility reached new heights with our electoral triumph in 2024 – even if Macron thinks that he can deny this victory.

The acceleration of political time

We've seen an incredible acceleration of events during these last three decades. Not least with the end of the Cold War and the onset of climate change. We have not just looked on at these events as spectators but taken part in them as political protagonists. Generally speaking, we have moved from an age when we thought we had all the time in the world to one in which all we have are urgent deadlines to meet. All the absurdities in the way our world is organised are now merging into a single process. A collapse of human civilisation now seems unavoidable, unless we achieve radical change within a relatively short timeframe. The climate change that has begun is irreversible. Its impact will further unbalance a capitalist economy which is both threatened by its own excesses and totally incapable of getting them under control. As the world's centre of gravity tilts towards Asia, geopolitical rivalry is intensifying. The possibility of all-out warfare is resurfacing at an alarming pace.

But while there is ever more bad news, rather more inspiring prospects are emerging too. Projects to rebuild our world are arising from every corner. Each year sees a new citizens' revolution spring up somewhere, trying to find its way forwards. These energies will eventually lead to concrete results. After all, history is made by human beings. Everything is within our grasp, so it makes no sense to blinker our perspectives. We should be determined to achieve what is necessary, and nothing less than

that. Otherwise, why do anything? Thus, the activists of La France insoumise have set themselves the goal of changing the history of the world, starting by changing the history of their own country. The experience of the Great Revolution of 1789 showed how this was possible.

Crafting a way of thinking

In setting out my analyses, I have not invented anything myself. I have put together knowledge borrowed from others, in the various fields of interest for my work. Of course, even insofar as I am relying on others' work, what I do with their insights is my responsibility alone. My work does not belong to any of the human sciences that I make use of. The citizens' revolution is not an exact science but a user's manual for political action in the age of the people. But I do want to emphasise my debt to French thinkers. Unconstrained by any 'model', but in many cases drawing on the method of historical materialism, they have arrived at important findings that help us to think differently about the world and our times.

I have written a great deal over the years, and especially so during this most recent period of upheaval, when three sequences of citizens' revolutions were playing out in France. I am talking here about the Gilets Jaunes movement, the mobilisation against Emmanuel Macron's pension reform, and the urban revolts of 2023 that came in response to the police killing of seventeen-year-old Nahel Merzouk. The sheer vitality of these events, which I experienced at the forefront thanks to my own political role, and their effect in confirming our theory of the age of the people pushed me to write this book. It marks a step forwards in a political theory in the making, developed as part of the political activity informed by this same theory.

I never stop telling myself how much this odd country of mine is but one sensitive part of the great collective of humanity. I already mentioned how often France expresses wider tendencies and impulses in a more concentrated form. I know that this is still the case today.

The end of the democratic project

President Macron's autocratic slide is not the result of his own individual psychology, however peculiar it might be. Rather, he is the unembellished embodiment of a certain moment in the history of our globalised society. This is the moment when the neoliberalism that dominates the world enters a new phase, in which it abandons the democratic project. There may seem to be a contradiction here: for this same project had successfully supported neoliberalism's spread around the world, against all opposing, 'undemocratic' political regimes. In Europe, we have a front-row seat to this phenomenon in action. How can we understand why our societies are slipping towards the authoritarian forms that they so vigorously denounced even in the recent past? This corresponds to a moment when oligarchies' authority and power over society are being challenged across the old continent. Oligarchies turn to authoritarianism once they have exhausted the other means that usually guarantee their supremacy. So authoritarianism is a response to the crisis of authority, and not simply an abusive extension of it. How does this happen? The crisis of authority is a product of the material conditions of the life of a society.

A breeding ground for authoritarianism

Health care, food, education and housing are not optional extras but the inescapable necessities of our material existence. All of these activities are gradually moving from the more or less egalitarian systems of the previous era to a form of commodification that is, by definition, radically unequal. The inequality of the means of accessing them then takes on its full force. It undermines all hopes of improving one's existence and spreads individual deprivation ever more widely. For three generations, the peoples of Europe had lived in exactly the opposite atmosphere. The crisis of authority is rooted in an inability to handle the social and political consequences of this profound destabilisation of people's daily lives. This is as true in the former Soviet-dominated East as in the social-democratic West. There is a common cause in both cases. The modus operandi of the neoliberal project, and its successes themselves, are forcing a retreat from the democratic project based on which European societies were rebuilt after the Second World War. The rule of the market in all fields is everywhere confronted with existing rules and norms which the neoliberals say distort competition and the free movement of goods. This inevitably leads neoliberals to attack the source of all regulations, laws and standards: the sovereignty of the people, expressed in the votes and the parliaments where these measures are decided. There is thus an intrinsic link between the spread of neoliberalism and the retreat of both social and democratic rights. The invasion of the US Capitol Building after the 2020 presidential election that ousted Trump and Macron's refusal to recognise the result of the 2024 snap parliamentary elections have shown that this process can have no limits.

Globalisation, the source of instability

We see how the instability in today's societies is rooted in the deregulation of the social relations of production and exchange. This also entails the

deregulation of the legal, cultural and other frameworks that hitherto underpinned individuals' daily lives. Today, people everywhere are having their lives disjointed by a forced integration into capitalist globalisation. This transition is pulverising the old social relationships and thus the fundamentals of life.

This is also why – almost out of the blue – Western Europe has seen most indicators of its well-being plummet. Health, fertility and epidemics have once again become burning issues. Inequality, poverty and hunger have once again become mass problems, even where they had previously been eradicated. The middle classes, essential to the balance of this social model, have seen their position collapse and their standard of living considerably worsened. All this coincides with a more general phenomenon that itself adds to this destabilisation: climate change and the effects of the destruction of the ecosystem. Conflicts over resource use are springing up everywhere, as are climatic disasters that are disrupting people's lives, both in the short and long term, and making their situations more precarious. We see this as a series of floods hit towns and villages across France and Germany. Droughts, floods and extreme winds are now commonplace in all southern European countries. Everything is under threat, all at once.

The established political systems, their parties and the institutions that they run now come under accusation. They are simultaneously held responsible for the situation and seen as powerless to fix it in a way that would allow everyone to lead a decent life. The result is a radical crisis of popular consent for the authorities that rule over their subjects. Yet no society can live in peace without this consent. This is why the first objective of authoritarian government is to silence and forbid the expression of any challenge to authority and to destroy the organisations and individuals who defy it in such a way. In other words, its primary function is to stop the contagion of the opposition's message, by shooting the messengers. It means stopping their listeners from believing what they hear, and

concealing what really ought to be seen. In such conditions, democracy itself is at stake.

This book

This introduction is not intended as a summary of this book; it places it in its immediate context. The chapters that follow say a lot more than these few pages ever could. A word of advice: feel free to wade through the jungle of my words and argumentations as you wish. If you have any difficulty doing so, it is surely my fault: I do not always have the talent for putting things simply. There is no shame in skipping sections or chapters when you feel bogged down or bored. You will find the opportunity to come back to it, if the progress of my argument produces the curiosity and stirs up the motivation that I hope it will.

I do not write for my own benefit. Of course, it is a joy to write. I am grateful to the teachers of various kinds who have taught me to do so. But I take to the keyboard thinking of all those who hope for a different world, which they will themselves bring about by rebelling against the rules of the current one. Dear reader, you and I know each other. We have forged a close bond of political commitment. In campaigns, political battles and rallies, in France, South America or Africa, giving talks or taking part in events, I have met parts of this great human cohort from all over the world, ever ready for the sacrifices and the enthusiasms of revolutionary action. These sacrifices and enthusiasms can sometimes fill a whole lifetime, or even several generations of the same family. I owe these lines to you, as well.

I also write as a tribune of the people, as a spokesperson for La France insoumise and as someone fully aware of the moment in which I am writing. For I do so in a time when the member-states of the European

Union, and a few other similarly powerful countries, are handing over the reins of government to the far right. We are seeing a downward spiral which also took place at the beginning of the twentieth century. A whole moneyed class has forgotten what happened almost a century ago, when its far-right guard dogs leapt up on the table and ate from its plates in Germany and Italy, when the centre parties and their media handed power to the Nazis and fascists. In France, a front stretching from Macron to Marine Le Pen is forming along the same lines as in Italy, Hungary, Finland and other countries. The United Nations is despairing for human rights in France! The old continent that started two world wars is still capable of doing its worst. But beyond political programmes, we can see how racism, hatred of foreigners and small-minded chauvinism shape a reactionary model that points to a frightening course of change. Climate change is already setting millions of migrants on the move. Our so-called Western societies are ageing hopelessly in the face of a young world eager to live life in full. Many prefer to curse blacks, Arabs and Jews rather than question their own absurd orgies of consumption and face up to the challenge of our species' survival. I am making a wager based on reason and our appetite for a better future. My optimism for action is designed to convince people of the need to look clearly at the obstacles ahead of us. Knowing that we are mortals encourages us to live life fully.

When I was first politically active as a young man in the last century, Marxism provided the key to all doors. It offered an analytical lens for sorting, ordering and interpreting the most confusing facts. The part of this that has stood the test of reality (and it is surely a large part of it) has served as the basis for the new theoretical framework that I have set out here. The theory of the age of the people and the citizens' revolution is a proposal for how to decode the world around us.

This book is a call to action. It is an appeal for constant rebellion against an unjust and destructive world order. It shows why our pessimism about

what we see in front of us should not undermine our optimism for taking action to stop the destruction of the world’s beauty. For we must do so.

Unsustainable

1

The Force of Numbers

Before present

If the year of my birth in the middle of the last century is any indication, I have some connection to the calamities that began around that period. Indeed, if you take a closer look at the twentieth century, there was a pivotal moment around the mid-point in 1950. It seems that the euphoria that followed the Second World War had numbed our vigilance. We had come through the worst of it, and it seemed that there were exciting prospects in store: decolonisation and endless growth. All this seemed to suggest that the good life for all was just around the corner.

Yet a vast change was about to occur that went almost unnoticed: for, in this same moment, human population numbers began to accelerate dramatically. The effects would surely make themselves known over time. You can see it in all the graphs – energy consumption, fertiliser use, water consumption and the extraction of all manner of resources: around 1950, these numbers all began to spike. The combination of booming population and the capitalist mode of production was about to wreak havoc. Both grew in a manner incompatible with the survival of the ecosystem on which they

depended – and, indeed, each amplified the harmful consequences of the other.

It is telling, in this sense, how the earth sciences refer to the year 1950. Everything before this date is called ‘before present’. In fact, after 1950, the dating of materials required adjustment for the altered level of radioactive carbon, as a result of the use – and open-air testing – of nuclear bombs. This level would never be the same again. It seems that history has a certain dark humour: the dawn of a new age of human life was marked by the ominous appearance of the weapons that could end all human history.

Numbers and history

Human history is fundamentally shaped by population numbers. Obviously, many other factors help explain how human societies develop. But in the end, numbers change everything. We cannot understand any human reality without considering its consequences for the ecosystem in which it is embedded. Now that the capitalist mode of production has a market of several billion consumers, it has a vastly different impact than it did during its initial rise in the nineteenth century, when both population numbers and production levels were much lower. The nature of predation on the ecosystem has changed completely. To produce and sell more and more, the usual plundering of the ecosystem has become simple devastation, which has gone beyond the point of no return. We can get a better sense of this by considering two important numbers: over the twentieth century, the production of goods increased fifty times over, while the human population quadrupled.[1] This was the moment when the global ecological crisis began.

But if we want to really get to grips with some of the most important new realities facing politics today, we need to draw the right conclusions. Unfortunately, politics and even political thought seem to pay rather little

attention to these developments, beyond imagining that they are a kind of backdrop to events. This is not the right way to look at it. In fact, the steep acceleration of the population growth curve and the triumph of capitalism have turned the whole structure of human civilisation on its head. If humanity wants to find a way to exist and not to self-destruct, then capitalism is not the right scaffolding to build on. If the history of human civilisation does, indeed, proceed arm in arm with capitalism, then this also sets an end point for its future existence. The number of human beings, in a sense, sets an expiry date for capitalism.

The pace of numbers

Our present era is, in many ways, exceptional. According to the United Nations, on 15 November 2022, the number of human beings on this planet surpassed 8 billion.[2] This total doubled in just seventy years. Nothing like this has ever happened before, in such a short space of time and involving such large numbers. It *should* never happen again. Otherwise, there will soon be 32 billion of us.

In the meantime, it is amazing to see how suddenly the rate of increase has accelerated. It took 300,000 years for the number of humans to reach 1 billion. That was close to the start of the industrial era, in around 1820.[3] But a hundred years later there were already 2 billion of us. So the second billion arrived 3,000 times faster than the first one had. After that, the pace quickened further still. We now have an extra billion people every twelve years or so. They are arriving 25,000 times faster than the first billion did. The trend is continuing. There are expected to be 10 billion people on the planet by 2100.[4] Then the number should start to fall: too late, we fear.

But let us not get bogged down with the total number. The *pace* of change is perhaps even more crucial. In past eras, human history used to

unfold at a rather more patient tempo. It took 160 generations to get from the first vestiges of agriculture and animal husbandry to the permanent settlement of people in the first cities.[5] But now, the increases in the number of humans have produced much shorter and more visible stages. And every time the world's population has doubled, this has been accompanied by a radical change in the human condition itself. This was already the case in the Neolithic period. This distant era gradually started to make itself felt less than 10,000 years BC. This was the first significant doubling of the population. In some regions, people went from gathering to farming, from stone tools to metal ones and from hunting to rearing livestock, alongside many other developments of similar magnitude. They turned human life and history upside down.

History accelerates

'You see,' I was told, 'the space from one end of this room to the other covers two millennia. And they're still the same objects.' I was in the Egyptian antiquities room at the Louvre. This comment made me wonder about the pace at which human history unfolds when it comes to the different phases of material production. This room of Egyptian artefacts imagines that it is proceeding at a snail's pace. But what a whirlwind tour even this is! Did the Egyptians of that era know what an incredible leap forwards their population numbers and level of production represented, compared with the depths of time from which they had only just emerged? How could they even have guessed at that? But the increases in population numbers really do set the pace of history. We see this when history visibly 'speeds up'. To get a better idea of this, it is worth imagining a calendar which condenses the entirety of human history into just one year, starting on 1 January and ending on 31 December.[6] I often use this example because

it really illustrates how slow material change is when there are not many people. Really slow. In fact, the opening parts of the calendar are almost blank. Nothing happens for ages. But, by the time we get to the bottom of the final page – the last few hours of the year – we have more events to write down than could fit on all the earlier pages put together. The more people there are, the greater the onrush of technical innovation.

If we condense human history into just one year, our first human ancestor was born on 1 January at 0:00 a.m. True, they invented the first tools on the first day. But fire was not tamed until the end of October. So ten months out of twelve passed with no changes worthy of note! Funeral rites appeared for the first time on 13 December. The Lascaux caves were painted around 28 December. In those days, people hunted and gathered on paths which they wandered along one generation after another. The Neolithic Revolution and agriculture began on 30 December. On 31 December, at around 4 a.m., came the invention of the wheel. The first steam engine went into service at 10 p.m. on the final day of the year. At 11:46 p.m. on New Year's Eve comes the first use of nuclear energy. Everything else – in other words, the bulk of our inventions – arrives in a hurried burst a few minutes before midnight. For instance? The first touchscreen telephone was launched at thirty-one seconds past 11:58 p.m. Between the birth of my grandmother and that of my granddaughter, the number of human beings increased sixfold. How many pages would I need to list all the radical upheavals contained just within this period?

From quantity to quality

This helps us see that the rising number of humans is not just a quantitative development, however impressive those billions may seem. It does not just alter the ecosystem by exploiting its resources. It also transforms human

society. It prompts qualitative social change. It massively extends the number of social interactions between individuals, the way in which they occupy space, the level of accumulated knowledge and the way in which individuals express themselves. It likewise alters the physical balance of power between social classes and nations. In the long term, the billions of human beings thinking, exchanging and acting at the same time have (almost) nothing in common with the small, semi-nomadic bands of the distant past.

Just as each generation moulds a new people, each major change in population creates a new humanity. The growth of the world's population has, indeed, brought radical changes in the human condition. A single 'human people' is emerging. This is, first, a result of living conditions becoming more homogeneous as humans have converged in the cities, after tens of thousands of years of peasant society. Second, it results from an extreme but contradictory rise in individualism. In a way, the age of the 'hyper-individual' is also the age of hyper-connectedness. Finally, we are now talking about an educated humanity. The accumulated stock of knowledge is available to everyone, and soon it will be available at any moment, by connecting to the terminals of the universal library of artificial intelligence.

One thing is for sure: these vast changes initially take place somehow under our noses. They emerge slowly and then gradually come to mould the whole of society. Contemporaries are too buried in their own concerns to notice: everything new and novel fades into the background of their routines. But these developments do indeed stick. The proof was plain to see in 2013, the same year the global population reached 7 billion. That year, more farmed fish were consumed than sea-caught fish, though this news did not itself make a splash. 2013 was thus the year when humanity turned from hunting to farming in the sea, too.

The numbers in the cities

In 1950, only 20 per cent of the world's population lived in cities. The rest lived in the countryside. By 2000, these proportions had been inverted both in Europe and in the Americas.[7] But this also happened rather quietly. Today, city life has become a matter of course. It is as if it has always existed. But it has not. It appeared rather belatedly. This only happened around 8,000 to 10,000 years ago, when the first cities were established. For more than 200,000 years, human history was essentially a semi-nomadic life in bands of varying sizes. Then the rise of living in cities produced a new way of being human and a very new way of living in society. Now, in the age of large numbers, urban life is the fabric of all our societies. The contemporary human being is a *homo urbanus,* shaped by the walls, streets, squares and networks that are part and parcel of city life. But cities are more than just scenery. Cities have always been deliberately created products of human effort. In turn, they shape the communities that produce them. At every longitude and latitude and in every culture, the city patterns behaviour. But it also makes people dependent on access to collective networks for them to be able to produce and reproduce their material existence. In contemporary societies, the architecture, advertising, street furniture and social problems are often identical – and have a dismal standardising effect. At the same time – unlike the dozens of past centuries in which styles, colours, sports, festivals and their calendars all developed incredibly differently – today a general phenomenon of *creolisation* is blending the entire human space and bringing out something new in common. Creolisation is Édouard Glissant's concept referring to the constant creative invention in a society, resulting from the encounter of different cultures present within it. He developed this concept by analysing the context of a deliberately fragmented slave society in the French Caribbean. The Creole language was produced by slaves as a means of

understanding and exchanging. Creolisation is the ability to create something new from what already exists. It’s an ongoing process.

This urban world has also given rise to a new social and political actor, namely the people, and new forms of action, namely citizens’ revolutions. This development is wholly wrapped up with the two major parameters of our era: large numbers and the rise of the ‘boundless’ city that is today their home.

The hyper-individual …

So we are talking about another way of being human. People long feared the gradual dilution of the individual in the crowd, the levelling by the mass, the contagion effect that forces standardisation. The opposite is now true. The rise of the individual is an essential fact of our time, contrary to what might have been expected. Yet the longer history of our societies is essentially one in which individuals proudly considered themselves simply part of a group. They belonged to their community in the strictest sense of the word. This sense of belonging extended to all fields of life. Obviously, it was also the rule in all areas of cultural representation: the way in which people referred to themselves, to their place and their formal status within the community, to their identification with parts of the tribal totem and so on. To ignore this sense of belonging was to cause serious offence. Until a very recent moment in human history, everyone was defined by social ties that were stable, specific and limited. These connections identified us in the eyes of others, and thus in our own eyes in return. These were the relations of family, of neighbourhood, of the housing block, of the occupational hierarchy. But all such ties have now become too volatile for them to permanently define us throughout our whole lives. If anything, the opposite is true: the more people there are, the more complex the pattern of an

individual’s social relations. There is a systematic connection between the explosion in human numbers and the rise of the individual. The more people there are, the more they are integrated into long chains of interdependence. These interdependencies are built differently for each person, according to their evolving social position, needs and obligations. But the more people there are, the more these relations are changeable, and the more each person asserts their own individuality in their personal handling of this situation. Added to this is a growing and ever-changing mass of entitlement codes, personnel numbers, identifiers and passwords, whose details, interconnection and rationale only the individual can know. They are all markers of personal territory. If we had to give this particular type a name, we could speak of the rise of the hyper-individual.

Hyper-socialisation

But there is also something rather paradoxical about all this. The age of great population numbers is also an age in which each and every human being is thoroughly socialised. To live our lives, we need to be ever more bound to long chains of dependence, and we constantly have to draw on all kinds of connections. Uninterrupted communication has become the material basis for a new way of being human, in which we are ever more closely connected with others. This is the basic condition for anyone who wants to take part in the life of our society. Given that the old means and customs of personal communication were once much more limited, it was only to be expected that a new system would eventually replace them. This field has seen a real transformation. Considered in the broad sweep of history, the vast change represented by our digital connectedness happened only very recently. This connectedness makes it possible to integrate every individual into a social network forming a long chain of interactions. It also

allows us to create a much more intensive web of individual relations. These changes all generate greater interdependence, but also a radical individualisation of each person's relationship with the rest of the community, seeing as each human being is integrated into this network in a personal, individual way. The two processes go hand in hand. Vast digital worlds are now within the individual's reach. Thousands of applications are becoming accessible in all areas of activity. Of the most common, 4,000 are satellite applications. Earth and space form a permanent continuum for all of us – the gateway to countless digital worlds.

The possibility for each person to access all the information, relationships and services involved in this sphere of connections gives the digital arena a central role that would, until recently, have been simply inconceivable. Its physical infrastructure has extended on a massive scale. Billions of smartphones, tens of billions of online objects turning their data into information, billions of ADSL routers and fibre-optic connections, millions of base stations and hosted servers. Then there are the millions of miles of cable carrying the data, and the thousands of observation and communications satellites gathering information 24/7 as they circle the planet tens of thousands of times over.[8] All this reflects quite some investment. And also vast profits: for the longevity and the sheer reach of this technology is guaranteed by human needs, and no effort has been spared in moulding what are today considered 'needs'. This will be a crucial structure of society and of private life long into the future, without which all manner of possibilities will be closed off. Or so we should imagine, unless electricity supplies are interrupted by climate change. This is the Achilles heel of the new context.

Hyperconnected

Already when the human population hit 5 billion, it saw a new community emerge within its ranks – and with it, a whole new way of life. At the end of the 1980s, the first companies started to provide Internet access. Its early use was immediately combined with the rise of the first 'social networks' (blogs, Hotmail and Six Degrees). A September 2022 report by the UN-linked International Telecommunication Union (ITU) gives some idea of the kind of contagion effect this had: there were 82 million computers connected to the Internet in 1997, but by September 2000 there were already 377 million.[9] One billion people were connected in 2005. Then almost 4 billion by the end of 2016. Since 2022, the counting has mostly been done the other way around: it is said that one-third of the world's population is still without Internet access. The rest – 5.3 billion people worldwide – share a life on the web. They love it. Human beings have a taste for personal exchanges in which they join in with the most varied human communities, on the basis of something they share. In this age of huge population numbers, we can further see this in the growing number of people active on the best-known social network, Facebook. It has developed together with the further doubling of the world's billions of people. In 2008, there were 400,000 users, but by 2015 there were already 1.5 billion. And by 2022 there were almost 3 billion of them. The following year, an agency specialising in this field calculated that some two-thirds of human beings are active on a social network.

But here is the most striking thing: mobile phones are the way most people access the Internet. Some 92 per cent of Internet users are connected from a smartphone. Today, three-quarters of people over the age of ten have one in their pocket. Have we understood quite what this means? Every human being has a physical and interactive connection to (almost) everyone else. It is as if we've sprouted another organ.

Being in many places at once

Hence, a new era of human sociability was born. It soon replaced the letters sent by post – and even speaking on the phone. Chat rooms and social networks took over. Some of my readers likely have next to no idea of the other world which we so recently left behind: the world without social media, without instant messaging, without a connection accessible night and day with all your contacts or ‘friends’, ‘subscribers’ or ‘followers’. It makes up an increasingly inclusive global community, an intense web of connections that has simply no historical precedent. This is another effect of the great acceleration.

In this connected world, the real and the virtual are not two distinct conditions, but simply two different moments in time. We see this in the rise of a new type of personal behaviour: being present in more than one place at a time. We can be here at the table, chatting with other people, while simultaneously connecting with others via instant messaging. These possibilities have an impact on every part of life that they touch. That is why this technology has become essential for political activity too. Millions of people are now trained in the use of networks for countless reasons, some of them trivial. These same tools are available when they need to turn their emotions to political mobilisation. They do this with the same force of spontaneity, the same linguistic ingenuity, and the same codes and ways of being that they have learned from apps. Taken as a whole, social networks and group chats are places where people build relationships of a kind never seen before. This is also where citizens make themselves heard, when issues that stir them into action appear online, along with situations in which this fact of being present in more than one place at the same time is an asset for taking action. Hence, the networked online space is the main and sometimes even only contemporary *agora* – the starting point for countless protests. This new era of politics is the direct product of the age of mass technology and of the individualisation of human communities. Social networks are

now an integral part of the fabric of human society. This has given the political space a new dimension.

The shape of the problem

The rise of population numbers presents a special kind of challenge. It has an unstoppable dynamic. Each increase in the number of humans means more children for the next generation. This also means that ever-increasing needs must be met. But the capitalist mode of production does not settle for that. It must constantly create new needs and new markets – and continually find the techniques and raw materials necessary to provide for them. There is a close interconnection between the number of people, the development of relations between individuals, and technological understanding.

But it would be mistaken to blame the number of guests who have showed up at the party. Numbers are not a problem in themselves. It is just a form that the problem takes. Would you tell someone that they have too many children? And what concrete conclusions should we draw from this? We obviously need to give people the proper means to control their reproduction. But the aim cannot be to fix limits. Instead, we need to give everyone the choice, so that they can control their biological functions and not let these latter decide their fate and their social outcomes.

Reining in predation on the ecosystem: this is the one problem for which realistic solutions could and should be found. But how should we approach this issue? We all know the ‘green rule’: never take more from nature than it is able to replenish. There is also an implicit idea nestled within this: the need to square the rhythms of humans’ activity aimed at reproducing their own material existence, and the ecosystem’s activity in reproducing the conditions of its own balance. So here we arrive at a revolutionary idea:

action to create such harmony in today’s global reality. But to what end? And how?

2

The New Space–Time

I would agree: it is a tough ask explaining that time is really part of our social universe, and then talking about its rhythms and their link with the other aspects of the life of a society. But I will just have to rise to the challenge.

What I am interested in demonstrating here is that capitalism constitutes a particular ‘space–time’, indeed one that dominates all the rhythms of society. I want to show that the global environmental crisis centres on a clash between various rhythms. I am going to tell the story of how capitalism’s fundamental internal rhythm has upturned all the others around it, leaving them out of joint. This is the story of how its accelerated tempo has prevailed in all areas, and how this has dislocated the rhythms of social and biological life.

From the lifespan of material objects to the longevity of living beings, capitalism has now become the master of all clocks. But why? Without doubt, this is not the result of some plot that has been hatched or some preconceived plan. This is just a consequence of its fundamental internal logic. In order to survive in this system, the initial capital must grow and turn into a bigger capital, and this operation must be repeated as many times

as possible, as quickly as possible. In its quest for profit, and its accumulation of money, capitalism is first and foremost a rhythm.

In this context, when we call for ecological planning and the ‘green rule’, we are not talking about some managerial planning operation under the benevolent gaze of the technocrats. We are talking about a revolutionary seizure of power – that is, of power over time itself. This means reclaiming ownership of time and making it a common good, collectively managed for the single purpose of achieving harmony. By ‘harmony’, I am not referring to something purely aesthetic. Harmony means replacing the dictatorship of short-term capitalist time with a world in which social time is aligned with ecological time. True, here I have strung together a series of phrases that our political vernacular is not exactly used to. So I will pick up where I left off and describe what I mean by all this. This ‘harmony’ is a crucial political project, a response to the problems posed by the ‘age of the people’.

The social character of time

The space–time of everyday life

We do not usually think of time as a social and political issue. We think more like: ‘It went by so fast,’ or ‘It was never-ending!’ We experience time, above all, in terms of how long something lasts. It will seem short or long depending on the circumstances and our mood. Our wristwatch measures time across the short term of one day, the calendar across the longer term of one year. What we instinctively deduce from this is the existence of a general, all-encompassing time. In fact, there is a simple mechanism that somehow creates this impression in our brains. It constantly compares what it discovers (the present) with what it has memorised (the

past), with a view to taking action (in the future). Here, the arrow of time is a by-product of our mental activity. This is a useful and practical way of seeing time. But it is nothing more than that.

We have a wholly different experience of the time we spend on a day-to-day basis – time in the life of our society. We have to organise our time to make it run as smoothly as possible. To do this, we string together, as best we can, the times for doing various activities and the time spent getting from A to B. This soon gives us a good intuition of this rather abstract word ‘space–time’, and also of the need to prioritise one time over another. In all our own lives, there are the times that count the most, and the others that have to be squeezed in as far as possible. We have no choice but to make them fit together. Usually, our working hours set the tone for everything else. The times for our children’s various activities and especially the time at the crèche or at school are just as imperative. All this decides the rest: setting the clock for getting up and going to bed, the time for a thousand and one other things that need doing, such as preparing meals, and shopping for food and other essential supplies. We use our rather limited personal free time to fit in our social lives. It is especially under pressure when we have to factor in transport timetables and sometimes fit our time around the various appointments or private services on which we rely. It is often a ‘stampede’: a simple word that speaks to the physical effort required to squeeze everything into the time we have, limited as we are by the speed of getting around.

This is the space–time of our everyday lives. It is made up of *dominant* and *dominated* times, free time and constrained time. There are the different spaces which we need to connect together, and means of transport with timetables of their own, but which take up varying amounts of time depending on how busy buses and trains are and how bad the traffic jams are. This space–time is dictated by non-negotiable social rules. Working time and shift patterns are set out in employment contracts, school and

nursery hours are laid down in regulations, as are the timetables on which services run. Biological time also has to adapt to these rules: we have to be hungry at mealtimes, and sleepy when it is time to go to bed. This is how we harmonise time: from waking to sleep, everything is fitted together, and everything must be made to hold together. This sets the rhythm of our lives. But it is not exactly our own choice. If the individual's time is, indeed, a product of the way in which the surrounding society is organised, then it is also governed by the various types of systemic domination that shape this society. But what activity will impart its rhythm to all the others – and who gets to decide, anyway? A power that we hardly notice is now exercised over all aspects of our lives. But who is in control?

Measuring

Our daily lives depend on the different rhythms which run through society. Still, these are all basically linked to one central rhythm, which takes priority over the others and forces them into alignment with it. The same can be said of society as a whole. For thousands of years, it obeyed an astronomical rhythm – the rate of the planet's revolutions around the sun. This rhythm produces the seasons and the cycle of day and night. This dictated the rhythms of agriculture and daily life, as the seasons came and went. Throughout this era in human history, the passing of the seasons was decisive for the dominant economic activities from which human beings derived the means of life and exchange. All the other individual times were thus aligned to this central rhythm.

In that world, accurate timetables were not all that useful. For centuries and centuries, time flowed in great sequences, in a single course. There was no need to measure the flow of time in any great detail. At most, there were certain useful markers between day and night. You would meet up in the morning, plan to be back around noon and so on, using rather rough points of reference. Of course, there were instruments for measuring time:

clepsydras, hourglasses and other individual tools. But they were not widely used. Collective time such as we know it today – measured by everyone in the same way, and imposing its rhythms on everyone – would only appear much later. The first public clock measuring time for everyone in the same way was not set up until the late fourteenth century – in Milan in 1386. It was followed by the first mechanical clocks, which had no dials. They rang twenty-four times a day! So the first measurement of the rhythm of time was also a rhythm in sound.

There is always a clock master

But, at this point, we should understand one basic fact: the instruments for measuring time emerged and spread together with the need to measure time. In fact, in European Christendom, the need to measure time first arose in order to coordinate the material and spiritual activities of monks, in between their workshops in the monasteries and the times of prayer. I must say that, when I look at the arrival of the first machines equipped with weights, which replaced water clocks, I see more than just an advance in clockmaking. Above all, I see progress in the metal-working used to drill or finely cut the regular notches in the gears, to produce flat spiral springs, to increase their ability to withstand wear and tear, and so on. Looking at all this, I imagine that other machines were needed to produce the various components, and that workshops developed in which each workstation performed some differentiated task. So they also point to the evolution of production as a whole. The division of labour was beginning to take form. It had internal rhythms of its own, and the various activities had to be fitted together. So it was also necessary to measure time in order to piece together these various stages. In short: the first lesson, here, is that the master of clocks is the master of the system that makes them.

Generally speaking, the progress in the measurement of time is itself a sign of humans' improved ability to discern rhythms, such as those of the

flowing of water or sand. Then all we have to do is measure them. It is just a question of technique. The same is true today. Goodbye to the traditional standards of weight and measure displayed in some museum cabinet! They no longer have any practical use in measuring time, which now has a precise physical definition. This, in turn, reveals the state of our knowledge of matter and our technical ability to measure its rhythms. Since 13 October 1967, there has even been a new definition of the second. You might need to concentrate for this one … It is defined as the duration of 9,192,631,770 periods of the electromagnetic wave emitted by a caesium 133 atom when it passes from one energy level to another.[1] Got it? Lesson two. Time and rhythm are two names for the same reality in the physical universe. In society, time is also a property of the social universe. It imparts a rhythm that corresponds to the needs of the dominant time. Lesson three: the master of the dominant rhythm also fashions time itself. And in so doing, he takes power! This is something worth dwelling on.

Capitalism as the dominant time

Production dominates time

But if one social time dominates the others, how does this domination extend its grip? How does it transmit its rhythm from one compartment of activity to another? In concrete terms: how does the hierarchy of social times in the capitalist market economy impose itself upon us?

We have already pointed to the central phenomenon. The rhythm and concordance of time are aligned with the times of production. But the series of stages in production also needs to be set in a hierarchical order. So the different stages in the division of labour must be made to fit together. In short: each workbench is the supplier for the next. And this synchrony

immediately extends to the various other stages which are organised around this central time. In other words, the moments preceding or following production itself. A company's employees, supplies and deliveries must converge so that they will all enter and leave the same place in a coordinated and coherent way. This is also crucial in terms of speeding up turnaround times and making production run more smoothly. Yet all manner of spatial divides separate the sources of supplies and the places of assembly, production sites and delivery addresses, employees' homes and workplaces. This all involves a wide array of transport times, which are a crucial factor in making production run smoothly or not. The (constrained but fluid) movements in and out of this system then change the nature of space, integrating it into a dimension of human-controlled time. Roads, motorways and railways are all examples of infrastructure that remove the obstacle of hills, rivers and miles of terrain, which are all instead transformed into journey times. This infrastructure allows transport times to be calculated in advance and adjusted to the necessary arrival time. As a result, when production is run on a 'just-in-time' basis, this also means that many other related social times must be suddenly subordinated to it.

Aligning the clocks at the company level

Here, the company's order book dictates its rhythms of operation – and other rhythms too. Working hours, production rates and shipping times are all subject to the same rhythm. They can be synchronised because they no longer take account of day and night, or ordinary working hours, or the hours of school or family life. When the company is receiving supplies or delivering to customers, the roads are suddenly jammed with lorries. This also affects everyone's commute. All this traffic suddenly impacts the rhythm of everyone and everything else that is circulating. Yet it is crucial for everyday life in the urban space. Free time is snatched from us, and

instead becomes the time we are forced to spend travelling. This completely transforms the individual's time.

Production times are also fundamentally changing distance itself. Measuring distances in miles or kilometres no longer makes sense. It might be ten miles to drive into the city centre, as the crow flies. But we are not birds. The real distance 'measures' between twenty-five minutes if you drive at 3 a.m., and an hour and a half if it's 6 p.m. That is because you have to measure it in travel time. The time you set off from work no longer necessarily corresponds to the final bell at the school or nursery. Even for members of the same family, the times for getting up, going to bed and eating meals may not be synchronised. A business will not be too worried about this kind of mismatch between other times: that is simply not its problem. Schedules and shift patterns are laid down: take it or leave it. Ultimately, in capitalist space–time, the amount of time spent travelling is the only relevant geographical fact.

Tensions between times

Globalised production means a constant back and forth between production sites, corresponding to the various stages of product assembly. The manufacturing process can only hold together if the transport and deliveries between one point and another fit together too. For capitalists, controlling this space–time and – as Karl Marx put it – 'annihilating space through time' is extremely profitable. But if it might easily be surmised that this is a question of the *speed* of transport, there is actually more to it than that. It is a question of keeping things running at a *regular* pace, and thus of being able to master the conditions in which everything moves around. To erase distance, all you need to do is control the pace of deliveries upstream or downstream of production. This is what a major shipowner says when I ask him about the speed of deliveries via 'sea routes' and the port facilities on either end. 'It doesn't matter how fast we ship,' he says. 'It's just about

keeping a regular pace. It’s about making deliveries on time to supply production when it needs them.’ Here, it does not matter whether we are talking about transporting goods, people or information along digital channels. Ensuring that things keep moving at a regular tempo is thus an essential element of power itself.

So all this together amounts to the construction of a specific space–time, which is achieved when control is established over the various other rhythms on which it relies. The creation of this space–time – in which products designed at thousands of miles’ distance are delivered as if they were all made in one workshop – does not erase all geographical space. Rather, it builds a new such space, based on dedicated physical infrastructure, a concrete network of roads, ports, ships, containers and the workshops needed to produce this infrastructure itself. All this allows for a harmonisation of the various social rhythms and times encompassed by this new contemporary capitalist space–time. I am not just using the expression ‘capitalist space–time’ for descriptive effect. It refers to a material reality.

To put that more concretely, let’s imagine this process in terms of a single factory in a single location. The factory organises a space, marked out by its walls, within which various subspaces handle the various stages of production: the intake of raw materials or spare parts, assembly, painting, quality control, storage and delivery. This production plant also operates under the dominance of a single time. This is the rhythm of the passage from one stage to the next and, ultimately, the cycle from the first to the last phase so that the whole process can keep starting over again. The factory thus forms a specific spatio-temporal framework. The globalisation of production, with the resulting fragmentation, works in the same way. This is the spatio-temporal framework of modern capitalism. It engulfs all reality and imposes its own rhythm upon it.

Space–time zero

This simple example contains several essential lessons. First, it shows how the socially dominant time is necessarily the time favoured by the socially dominant interests. Second, it points to the fact that capitalist space–time is not a ‘state of nature’, but something that the system methodically constructs. It is no longer a reality that pre-exists the human will, as mountain passes, fords and plains were for the space–time of earlier periods.

As a general statement, we can say that capitalism is, first and foremost, a specific space–time. Agricultural society lived according to the rhythm of solar time. This time imparted its rhythm to this society’s source of production, namely cultivated land. Capitalism, on the other hand, is built on the rhythm of the cycle of money transformed into commodities which are, in turn, transformed into money. Capitalism’s fundamental agenda is to constantly accelerate this cycle. It will subject all the compartments of production and exchange to this cycle and to this rhythm. Its highest ambition would be to complete this entire cycle in zero time and thus in zero space. This is, partly, what is happening. Here, the rule that the dominant time is the time of the dominant applies to capitalism itself. For in the present era, it is financial capitalism that rules the roost. Its *tempo* dominates. It is tending towards zero. This zero time is the time of speculation, in the buying and selling of shares and other financial securities. This is where the profits of all material activity are tapped. Under the effect of this contraction of time, reality itself becomes rather strange. From 1945 to 1975, shares were, on average, held for six years. That was before there were 2 billion people. Then the global financial sphere came into being. Between 1985 and 2000, when the world population hit 6 billion, the average time of share ownership fell to two years. Then it fell further, to eleven months today. But here is the most remarkable thing. It now falls to twenty-two seconds when we factor in high-frequency trading: the buying and selling of all kinds of securities, day and night.

The appropriation of time and space

This is the space–time zero (or something close to it) of the digitised, global financial sphere. It concentrates all kinds of power. In this world, we can, generally speaking, deduce a hierarchical ordering of powers: the closer you get to time zero, the greater the power. In particular, this means the power to subjugate other times to oneself and one's own interests – all other times, including the ones that we might have imagined to be unchanging, given the material reality of the Earth's rotation around the sun, the seasons and the geography of the land. But we already get an important indicator when we see that an agricultural product changes hands between different financial actors several dozen times over, even as it is still being sowed, harvested and processed. This example points to the existence of a new space–time, unbound from the astronomical time that has been unchanging for billions of years. It has also freed itself from the material distances between the stages of globalised activity, through the harmonisation of the cycles of production and transport. Seeing things as a whole – and however well concealed this is – in globalised capitalism, the harmonisation of social times has also been appropriated. Yes, today there is one dominant time, and it constrains all the others, and this dominant time is a short-termist time. All the power in our society lies with what today's vocabulary calls 'real-time' operations. It is as if the longer term didn't exist any more. We can thus see a general contraction of time, which is also fragmenting other social times.

The time of the living world

The exhaustion of dominated time

If time is being put out of joint, this is affecting even the most intimate rhythms of human life. Under so much pressure, social time is shattered. Here is an example that often gets overlooked: the amount of time devoted to working activity and to sleep. Today, ever less of the night is devoted to the sleep and rest which our biological clocks demand. Night-time work is constantly expanding. In France, 15 per cent of employees – some 4 million people – work at night.[2] One in three public employees does so. This is a serious development. This trend has gone hand in hand with the formation of the new space–time of globalised capitalism. In the current century, with the creation of a globalised digital space, financial transactions no longer take a break between day and night. Rather, they operate continuously, in one hemisphere and then the other. This discordance of time, which is constantly aggravated by the contraction of social time, has an essential effect on human life. For dominated times are left exhausted. Overstretched, their ability to replenish themselves inexorably declines over time, to the point of disappearing entirely. Taken in the broadest sense, the need for the 'green rule' – which requires us to stop taking from an ecosystem when it is no longer capable of replenishing itself – is confirmed also with regard to humanity per se. This particular ecosystem can no longer renew its basic resource: the human being herself, as a material body. This is the case with night work and all forms of sleep deprivation. The loss caused is never fully made up.

Crushing life

It's quite clear: the domination of one time over the others spares no area of reality. None. To illustrate its contagion effect, I will here draw on examples from a truly essential field: the living world. Here, I will not go back over the causes of the extinction of species, a process which is now well underway. I am not talking about the manipulation of life by genetically modified organisms (GMOs) or even the patenting of living things. No, I

am talking about life itself. The discrepancy between the space–time of contemporary capitalism and that of the ecosystem shows a sometimes unique ferocity, as it subjugates the rhythms of the living world. This happens not only when it selects, extinguishes or transforms lineages in biodiversity, but also when it subjects them to its own particular rhythm in order to exploit them as commodities. For example, a chicken could live for a decade. But factory farming allows it only six weeks. No more is needed for their commercial use. More would cost extra. In France, 50 million male chicks and 20 million female ducklings are deemed useless for production purposes.[3] So they are crushed alive, as soon as they are born, every year. Yes: crushed. Yes: alive.

Turned inside out

The contraction of time also has a morbid effect on the characteristics of our species. One such mechanism works like this: the technological environment takes features shaped by millennia of evolution and turns them against the human species itself. We suspect as much when cancers are identified, when fertility declines and when autoimmune diseases appear. These developments all demonstrate the impact of products that disturb our millennia-old biological functions. In these cases, too, we might suspect consumerism of having profited precisely by subverting processes that natural selection produced to meet quite different needs. Survival attributes produced by the slow rhythm of evolution are now turned against living things, under the impact of an accelerated time.

Sugar consumption is one example of this. It has become a morbid addiction. For thousands of years, sugar was only present in the human diet in small quantities. Yet for our bodies it is an essential nutrient which provides basic energy. Finding sugar, whether in fruit or in honey from bees, was an obvious advantage for survival. This has had two consequences for the evolution of our species. First, human bodies have

been calibrated to transform small doses of sugar into energy. Second, its consumption provokes a strong stimulus for the taste buds. And this activates the reward circuit in our brains. Evolution does not do anything by chance: eating something sugary gives us pleasure because it increases our chances of survival. The sudden change in our eating habits brought about by capitalism has disrupted these two patterns shaped over hundreds of thousands of years. In the space of a generation, we have gone from sugar scarcity to sugar glut. It is now found in every product in the food industry, and in quantities that are truly overflowing. This has nothing to do with our evolutionary needs. Playing on our taste buds, multinationals are adding it to frozen pizzas, tinned peas and even cold meats. Studies carried out on American, Canadian and German consumers have shown that 5 to 10 per cent of the population are addicted to sugar, just as they might be addicted to cocaine or nicotine.[4] This natural addiction is heightened by the flood of advertising by junk-food firms, which saturates the younger generations from a very early age. The results have not been long in coming. Junk food is the main cause of today's diabetes and obesity epidemics. The World Health Organization (WHO) estimates that obesity causes the death of 2.8 million people a year worldwide.[5] Between 1990 and 2022, worldwide diabetes increased fivefold.[6] Diabetes now affects one in eleven human beings. In the United States, insulin, the diabetes treatment, sells for twenty-one times the cost of its manufacture.[7] Poor health obviously increases dependence on the health care system: the public, socially run part, of course, but also the private part, and in particular big pharma. If it is often said that capitalism is well used to turning all sense and meaning upside down, then illness provides another excellent example: illness is also good business. Junk food, in general, is characteristic of the discordant time of our era. A recent social phenomenon – financialised sugar capitalism – meets with a biological phenomenon dating back thousands of years – our taste for sugar – and turns the situation upside down: what was once a

useful appetite becomes unhealthy. But it pays off handsomely. The evolution developed over a long period of time is suddenly turned inside out by the demands of the very short term.

Land, sea and their counter-rhythms

This clash among different rhythms is reproduced at every scale. And it also has a similar destructive force, for everything from individual living things to the environment which life inhabits. This is what we see when, despite all the warnings, 600,000 tonnes of plastic keep being dumped into the Mediterranean every year. Perhaps this ought to remind us that it takes a hundred years to replenish its water, in contact with the world's oceans, and that it takes centuries for plastics to decompose. The Mediterranean's ability to absorb more microplastics has already been exhausted. In turn, the oceans will be full of plastic by 2040.[8] All the organisms living in their waters will be contaminated. In fact, 88 per cent of marine species have already been affected by this pollution. So less than twenty years after the publication of this book, the process will be complete. This temporal discordance between the dumping of plastic waste and its decomposition shows how the clash of rhythms works – and how important it is for reaching a different understanding of the phenomena that today assail us.

Here I think that it is important to dwell a little on the issue of living environments. In truth, these are not 'things', but a set of conditions that come together in a certain balance among themselves. The clash among different cycles has a much more general effect, of staggering dimensions. The topsoil layer took 3.8 billion years to take form. Its composition is the result of countless adjustments across millennia. It depends on numerous species that are still living within it. It does not exist outside their life cycles. But it has lost half (half!) its fertility in the span of just fifty years.[9] Repairing the living world has become an urgent priority. Ultimately, this is all about one core issue. It is about organising the social times of production

so that its rhythms fit with the ones necessary for the ecosystem's own reproduction.

The already obsolete present

Time out of joint

When we focus only on the intensive production of some new product in a short cycle, it is impossible to assess its real impact. For the ecosystem's own rhythms mostly operate according to rather longer cycles. This is especially true of the most fundamental and pervasive of all such rhythms – the constant to and fro of water. It falls from the sky and flows along the land, then circulates through the seas and oceans, returning to the sky along the way. These are indeed long cycles. If we see that freshwater lakes take an average of seventeen years to replenish themselves, we get the measure of the length of the cycle that needs protecting.[10] But how should we assess the quality of the replacement water? This question is now posed because we are only just beginning to measure the level of pollution by pesticides and their decomposition products at all the stages of this cycle. This is all the truer since we have discovered the 'eternal pollutants' resulting from the decomposition of even the most common everyday products. In the Caribbean, the duration of chlordecone contamination for water, soil and bodies can be measured in the centuries. The largest underground water table in the Paris basin takes 30,000 years to recharge. But would even this allow it to shake off the effects of the pollution already inflicted by irresponsible agriculture and industry? More generally, when the conditions for responsible decision-making are denied, the short cycles of the productivist economy come into conflict with all the cycles of the ecosystem. A deciduous forest reaches maturity over a span of 180 years. What human being can, in their own lifetime, compensate for the effect that

its being chopped down has on a natural living environment? What is the use of changing our mind once the trees have already been felled? The clash of different times and rhythms is raging. They are a concentration of the problem of the ecological crisis. They are the core of this crisis.

Worn out, fast

It sounds normal, but it really is not. The advent of disposable products has inured us to the idea of single-use objects, which are quickly all used up. But think how many generations had quite the opposite concern! The foremost quality that an object could have, other than actually doing its job, was that it could withstand wear and tear. The aim of choosing such objects was simple and clear: not to need to make the same purchase again, for as long as possible. That was common sense: today it sounds like an anti-capitalist slogan. Because production, driven by the need to speed up the commodity cycle, deliberately shortens products' lifespan. This planned obsolescence, which could so easily be reined in by legislation, today means that everyday objects reach the end of their life at an accelerated pace. We might accept this, for a moment, for the simplest objects. But what about more sophisticated ones? A television in the 1980s worked for eleven years; now, only six. The lifespan of a PC – a recent object if ever there was one – has been cut by two-thirds, from ten years in 1990 to three years today. The same is true of the mobile phone, which has a lifespan of two years, compared with four in the year 2000.[11] I could go on. On average, we throw away almost 8 kilograms per person of electrical and electronic equipment per year – and in Europe, it's 18 kilograms per person.[12] What a gigantic waste of materials, some of which are awfully rare! This is the automatic consequence of aligning production with the contraction of time. It contaminates all use-values, in favour of exchange-values, in the contemporary economy. Time is out of joint, beyond the most absurd limits. We are talking here about objects whose design and

manufacture depend absolutely on human decisions. While we talk a lot about all the ‘recycling’ we are doing, the overall volume of electrical and electronic waste is increasing five times faster. This all sinks into the void of irresponsible waste and pollution. The root of the problem here is not the equipment itself, but the rate at which it is used. The lesson: the circulation of capital has no purpose other than its own expansion.

Aesthetic obsolescence

The crucial thing to understand is how anaesthetised people are to the sheer absurdity of this situation. One striking example is clothes production. Clearly, this corresponds to a need, indeed one that we have to meet many times over. Clothes suffer wear and tear. Sizes change. But the consequences are wildly over the top. Over the last twenty years, the amount of clothes bought has risen by 60 per cent. Yet one-third of what is produced is never sold. Ninety per cent of what’s left over is simply incinerated.[13] Billions of people live in tattered clothing while others indulge in compulsively buying ever more. But this addiction is also deliberately created, in a form of planned obsolescence meant to achieve the same result as in the case of domestic appliances. The cycle of producing and distributing this commodity has to be continually accelerated. The trigger for this psychological effect is – obviously – advertising. Advertising worms its way in. Its role is to push consumers to constantly change their desires and tastes, and to move on from exactly the ones that the same agencies’ advertising messages had been promoting the day before. So new products are constantly appearing, in every field. Yet their predecessors are still serviceable, and often their successors do not actually offer any new function. This happens even in the absence of any pressing demand coming from society itself. Quite the opposite: abundance has often already turned into overproduction. More than a third of new clothes are never sold. But we keep the ones we have only half as long!

There is no waste without people to waste it. Addiction to compulsive clothes shopping may have a clever name – ‘aesthetic obsolescence’ – but it remains a harmful social behaviour.

A fashion statement

The aesthetic obsolescence of clothing has a particularly dire ecological impact. First, it leads to significant consumption of fossil raw materials, as in polyester production. Polyester is a highly carbon-intensive fibre and the one most widely used in the textile industry. Seventy per cent of the synthetic fibres produced in the world come from petroleum. The circulation of so much carbonaceous material in synthetic clothing is the cause of 35 per cent of the primary microplastics released into the environment.[14] These are then passed on through the food chain. The picture is not necessarily much better when it comes to so-called ‘natural’ fibres. For example, cotton production uses a great deal of pesticides. These then seriously contaminate the water – and consume huge quantities of it. It takes some 2,700 litres of water to make a ‘regular’ cotton T-shirt! That’s the amount of water a person drinks in two and a half years. And they would do well to check what is really in their glass, because textile production is responsible for around 20 per cent of the world’s drinking water pollution, mainly because of dyes. And the damage does not stop there. We discard this garment after just thirty-five days of actually wearing it. That is the world average these days. Indeed, the next appalling effect of clothing’s short life cycle is the resulting increase in waste, not to mention the time it takes to decompose. An American produces thirty-seven kilos of textile waste a year.[15] In Europe, thirty kilos of textiles are bought per person per year; more than a third of this is thrown away.[16] In France, each person throws away around nine kilos of clothing, shoes and household linen a year. But less than a quarter of all this fabric is recycled to make something new.

Different rhythms clash

You cannot produce under these conditions without knowing what the consequences will be. The timescales are staggeringly out of joint. So many objects take just a few seconds to produce. But, after they have been used and thrown away, they take an incomparably long time to decompose and return to a state that the ecosystem could ever absorb. This is the clash between the rhythm of capitalism and that of the ecosystem. Every second, 30,000 cans and 20,000 plastic bottles come out of factories around the world. It takes five centuries for the former to decompose and a thousand years for the latter. It takes one second to make a plastic bag and four centuries for it to decompose. Of course, we know what sets the record for such absurd irresponsibility: radioactive waste. Here, even counting its lifespan means nothing, or just disrespects our intelligence. For example, when we say that it will take 10,000 years to be rid of radioactive waste, we may as well say 20,000 or 9,000.[17] No one will be there to check. Such an order of duration makes no sense on a human scale – the one we live by. And how can we make decisions, or correct them, on any other time scale? Does ‘responsibility’ still have any concrete meaning, outside this?

Harmony and planning

Here, we have just briefly looked at the discordant rhythms which this mode of production imposes on the ecosystem. We have looked into the existence and the power of the space–time constructed by the capitalism of our age. This is a universal mould that governs not only the relations of production, but also the whole of biological and social reality. This is the context in which human predation on the ecosystem takes on its disastrous meaning. Not so much because of its intensity as because of the discordant rhythms imposed on reality, in every field and on every scale.

The green rule

Humans could think and act differently – and have done before. For millennia, agriculture was based on the principle of matching the times of production with the times of the replenishment of resources. Obviously, the means of doing this have changed, as knowledge and farming practices have progressed. But why abandon the objective itself?

The ‘green rule’ proposes a return to this: never to take from the ecosystem more than it can replenish within the time frame corresponding to the disturbed cycle. Such a harmony is not just a sustainable arrangement. It is now a question of stopping us passing points of no return – if this has not happened already. That is the cost of time being out of joint as it is. Especially when it comes to the long cycles of the ecosystem: and most of them are, indeed, long. Understanding what is really at stake in the social control of time may allow us to get a handle on what may well be an essential cause of the current ecological catastrophe. This means renewing our approach to the idea of ecological planning. It gives concrete form to the rationale and method of nationalising time as a common good. Once we have seized this power, we can grasp the essential lever for completely changing what is now a political issue: the ‘time factor’. In a nutshell, this means overcoming the discordance of time that is at the root of the ecological crisis.

So, today, we need to radically change the rhythm by which our society runs, and instead prioritise the long term. This approach explains what the programme of La France insoumise meant by ‘harmony with nature’: quite simply, harmonising the cycles of human activity with those of the replenishment of the ecosystem. Identifying the discordances of time will make it possible to apply the ‘green rule’ as a standard, useful for measuring what degree of predation on the ecosystem may be tolerated. This is the logic: never take more from nature than it can replenish within a given reference period. And never produce more than can be recycled or

decomposed within a harmonious time frame. This adjective again points to the noun: harmony, the way in which the rhythm of multiple processes is tuned in an ensemble.

Harmony of the world

What is harmony? It is a complex physical arrangement of frequencies and wavelengths. Music is a good place to start for understanding the harmony of the world. Let us listen to a symphony orchestra. Each instrument emits sounds that are unique in duration, intensity, vibratory frequency and timbre. Yet, far from this producing a cacophony, the overall result can be quite pleasing to the ear! This is the role of the musical score: it matches the rhythms and frequencies of dozens of instruments over the duration of a piece of music.

Harmony is the result of a method of organisation. Its purpose, in the field we are talking about, is to protect the balance among the different components of the ecosystem. Indeed, human predation on the ecosystem is always going to be a challenge for its survival, simply since there are now so many of us. The balance which we are talking about achieving is not deadlock. It is a form of controlled tension. This is the new, eco-compatible space–time that needs to be made a reality. Ecological planning is therefore different from simple managerial planning as understood by technocrats. It aims to align the times and rhythms of society with the times and rhythms of the global ecosystem and its various components.

Throughout the chains of production and exchange, the crucial question here is the particular choice of rhythms. The social orchestra will have to coordinate the training up of producers, the transformation of machines, the choice of raw materials, the rate of production (and of making goods available), the timescales across which objects are consumed, and the recovery and recycling of waste. And everything in between.

3

The Age of Uncertainty

Knowledge in an age of uncertainty

Our mode of production has entered its morbid phase. But breaking with it – and setting another course, so that vast numbers of human beings can move towards a completely different way of life – is no simple task. We are not talking about a patch-up job, but a change from this civilisation to a different one. Is human society capable of that – and on what conditions? These are tough questions. But, as soon as they are asked, the assumptions behind the questions are also subject to doubt. Does what we are saying make any real sense? After all, the crisis of the ecosystem, and climate change in particular, are also having an impact on our knowledge itself. Today, all the scientific culture that has been accumulated over the centuries is itself being called into question. Of course, it remains decisive, inescapable. Yes, we must act: of course, we have to. But what would be an advisable course of action? It is impossible to begin any kind of ecological planning unless we have accurate knowledge of the terrain. In this situation, we have to confront a rather complicated question: how can we make appropriate political decisions if we do not have the right information about the situation? Rather than explain this paradox in abstract terms, I would

like to recount a real-life experience. That day, I was at high altitude in Bolivia: just a stone's throw from La Paz on the Altiplano, past the city of El Alto.

On Lake Titicaca

When I was a child, Lake Titicaca was the stuff of my dreams. Now I had it right here in front of me. It appears as if Jacques Cousteau himself brought all his equipment up here to explore the bottom of the lake and its Inca ruins. I look at the surface of the water. It is very blue. I know how it gets so blue. It is because of the sky. I said, 'I've never seen a sky so blue.' Admittedly, it's not the most original observation. But the four French and Bolivian scientists respond with a rather satisfied look. 'Yes,' said one of them, 'you've noticed.' And the other: 'That's only normal, you've got four kilometres less atmosphere.' Me: 'Oh really?' I wonder where those four kilometres have gone. Now, I do not look so smart. I can see it in their eyes. 'Well, yes, there's an obvious answer there. Lake Titicaca is at 4,000 metres above sea level,' they reply, smirking a little.

Today, this lake is shared between Peru and Bolivia. A team of French scientists is doing magnificent work with their colleagues from the University of La Paz. They have a base there to monitor the temperature of the bottom of the water, an instrument to measure the air, and who knows how many other things. All this on a small floating platform that is barely enough for one person to stand on. The lake is now monitored night and day, 24/7, from the bottom to the surface. Threatened by pollution from all kinds of waste-water discharges, it is also subject to the mood swings of climate change. Because the lake is famous, it has become emblematic of the disruption of major water cycles. Scientists from all over the world are looking at it. I was glad to see French scientists present at such a high intellectual level. But the conversation left me rather gloomy. The scientists

here are at the forefront of observing climate change – and the news is troubling.

Let me summarise. Climate change is well underway. The major disruptions are already in motion. We are on the brink of many other tipping points. We knew all that. But we really do need to grasp the scale of the problem. What is going to happen? This is the worst part: nobody knows. We do not know what changes will occur, or when, or what their effects will be afterwards. We are now plunged into a whole new situation, of permanent uncertainty. We should even say ‘structural’ uncertainty. For this uncertainty now stems from the very nature of the way in which events play out. The changes underway are neither constant nor gradual. We are entering an intermediate stage, between the previous climatic state and the future stabilisation of the climate system, if there is one. Between the two, there will be a long phase of changing stages of varying duration. Climatologists are also talking about how the warming cycle could produce another long ice age.

Phenological mismatches

From now on, everything is going to change, including change itself. ‘Have you thought about going to see the *indios?’,* I ask. My reputation is not going to improve here. ‘We’re doing that, don’t worry,’ I’m told. But everyone looks rather sorry. They explain. Traditional knowledge is based on repeated observations over the course of generations. This notes enduring coincidences: this or that shellfish appears before or after the arrival of a particular type of rain. A certain frog spawns before such and such a seasonal episode. Sadly, all this is also being disrupted by climate change. A year later, a UN alert on the subject confirms what the scientists at Titicaca were telling me about the lake.[1] It is called a ‘phenological mismatch’. The rhythms and cycles of nature form a gigantic clockwork made up of a thousand and one interlocking cogs. Until now, this calendar

of stages in the life cycle was organised like a musical score played in a loop, each time the planet revolved around the sun. Species interacting with the rest of life have learned over the ages to organise their activities according to these changing conditions. This is the concordance of biological time. Plants and animals in terrestrial and aquatic environments can be identified by variations in temperature and light levels, or by rainfall patterns. Hundreds of thousands of species germinate, bud, flower, reproduce, nest, hibernate or migrate based on these indicators. And our species is one of them.

Seasonal abnormalities

Climate change is now throwing all these rhythms into chaos. Temperature curves and rainfall patterns no longer correspond to ‘seasonal norms’. Other disturbances have a more direct human cause. UN experts have observed the reactions and adjustments of species to these upheavals. The mismatch between nature’s timetable and that of human activity is taking its toll on living things. Plants and animals are falling out of sync with their natural rhythms. But not all the species affected by this will always change their own life cycle in the same way or at the same pace. For example, plants come out of dormancy or die more quickly. Herbivores do not always make it in time. Soon, all human activities will be affected. Already, harvests are often taking a hit. How can we guarantee agricultural production if the buds open too quickly and are destroyed by frost in May? How will fishing be affected, if the migration patterns or reproduction cycles of the different species in the food chain fall out of kilter with each other? These are all consequences of the great discordance of times. It is unforeseen and often still unforeseeable, as unprecedented disturbances continue to follow one after the other.

Disruption of scientific knowledge

Traditional knowledge, built up over thousands of years of observation, has been turned on its head. Hence, tradition will not be able to provide us with any better information. The biological indicators of animal migrations or plant cycles no longer fit together as expected. So the local *indios* are coming to the scientists for news. ‘Is this science’s revenge?’, I ask.

‘It depends,’ they sigh. During the COVID-19 crisis, nobody went to collect data from observation stations in many countries.

‘Can it be automated?’

‘No, not always, and that may often cost more than hiring someone to take the readings. And you still need electricity …’ In short, collecting scientific data is an activity totally dependent on the social conditions of the places where it is carried out.

‘In any case,’ I am told, ‘in periods of change like this, data series are not constant. Nor are they linear. So mostly what we know is that we don’t know.’ I am left a little despondent. How can we make political decisions without stable data? Scientists’ work does show, however, how the collection and interpretation of repeated, large-scale and accurate data in a natural environment can yield information reliable enough to make the right decisions at the right time. But this knowledge depends on the collection of thousands of data sets, and their compilation, processing and rapid dissemination. This also demands teams capable of responding quickly and effectively to changing situations. They need to be trained and paid. How can we ensure this will happen, when the louts pushing the ‘invisible hand of the market’ and cuts in funding for public services reign supreme?

The art of the unexpected

The visit I am talking about here dates back to 2021. With the French presidential campaign already well underway, I accepted an invitation to take part in a counter-summit organised in La Paz. That discussion on Lake Titicaca made me realise what a staggering challenge we face. It is now

time for politics to tackle the art of managing the unforeseen. From now on, we will have to make decisions based on probabilistic calculations. This will change our relationship with science. It will become decisive, as a matter of survival. Political decision-makers will have to recognise the inextricable link between science, scientific research and the conditions in which they are conducted. This is why it is so important for all our futures that we have suitable public investment in basic research, laboratories, equipment and the recruitment of scientists themselves. I mention basic research because tomorrow's technical breakthroughs depend on it. We did not invent the quantum computer by trying to improve the telegraph, but by delving into the innermost fabric of matter. And let us not forget how valuable the human sciences are in helping us to understand a world that is suffering from fragmentation. Sociologists and anthropologists are real assets in such a moment. Of course, the human species is capable of considerable resilience in the face of the unexpected. Its migrations over the millennia have demonstrated its ability to frequently change environment. While so many other species are radically dependent on their biotope, humans are more independent. After all, the inhabitants of the North Pole are descendants of the Africans of times past. But how will 8 or 10 billion people react to a general disruption which affects all four corners of the Earth?

Sharing knowledge to combat chaos

So we are facing a disruption that we need to understand properly if we are going to be able to govern all its consequences. The advance of scientific understanding is one of the great shared human causes of our time. At a time of uncertainty, it alone can provide the support we need. Its observations, measurements and modelling can help us spot the warning signs of major upheavals ahead, and then help us to adapt. Once again, this is fundamentally a question of our social and economic model. At a trade

fair on biomimicry, I met the head of a company promoting a risk assessment application. It gives, for each street address, the probability of climatic or geological shocks such as temperatures, rainfall, earthquakes and so on. Another company which we met at a space forum used the same probabilistic tools to measure the necessary drip water emissions, day by day, for crops located in any precise location in the world, and even in a single field. Both had access to information gathered by satellite and ground stations over the last forty years. So this is possible. This information all comes from the work of public bodies, public observation satellites and rockets. Only the development of the application itself is a private undertaking. How can we make it more widely available? How can it be shared? We know the principle already: the more that such insight is shared, the more knowledge in general increases and develops.

Every man for himself?

That is not all. Continuous observation and sharing of results is crucial if we want to have deep enough knowledge to make decisions on preventive measures or on steps allowing for the repair of natural systems. The circulation of data and its collection in countless other areas depend on complex networks that are often globalised. This also tells us that pandemics, lockdowns and the halting of scientific operations due to funding cuts or an obsession with ‘profitability’ are bound to interrupt data collection. This can ultimately put everything out of joint, making it impossible to shape the further development of the situation in which we find ourselves. To model correctly, to forecast effectively, you need a mass of long-term data that is increasingly up to date and diversified. So governing in an era of ecological uncertainty requires special attention to the networks of data transmission and communication. These must become a kind of common property. Or they can be requisitioned, without restriction and as much as necessary. After all, if we do not have this data, it

will not be possible to plan how human societies will live in the new climate. This is a global problem, and the response must be global too. The monitoring of Lake Titicaca by scientists is just one example of the new internationalism that is needed. Without this, is it even possible to make political decisions in an age of uncertainty? In any case, regaining control of humanity's material activity is a necessity. This can only be done by drawing on all the knowledge needed to make adequate decisions faced with this new context. Above all, nothing should be allowed to hold back inventiveness and the progress of knowledge. This is not about seeking easy reassurance, blissfully believing in the power of technology to solve all problems. Quite the opposite: it is about understanding how little we can rely on this, and how crucial it is to our future that we arrive at a new, in-depth understanding of living beings and their ecosystems. This is today a possibility and has already come a long way. It begins by showing us the relationship between the number of individuals and the knowledge produced and transmitted by them – verified 10,000 years ago and confirmed today.

Numbers and knowledge

A cumulative culture

When I make this plea for progress in science and knowledge, I do so based on an assessment of history. If we delve deep enough into the past, we can identify a crucial resource for our species' survival. It reveals a link between numbers and knowledge. Around 300,000 years ago, different branches of the human species coexisted. Their lifestyles and their tools were more or less comparable. But, around 40,000 years ago, all of a sudden, our own ancestors' means of subsistence became much more

complex and efficient. What can explain all this? At first, the dominant idea was that some sort of genetic change must have occurred. It was supposed that this gave our ancestors the means to surpass the other humanoids' (and, of course, other animals') level of understanding and invention.

But today this seems like far too narrow a perspective. Individual intellectual capacities, however great they may be, are not enough to facilitate adaptation to the environment or to improve performance in exploiting that environment. Well-known practical experiments tell us as much. Even an Albert Einstein sent to the North Pole would soon be in danger of perishing, especially faced with the more hostile environments. He would not survive unless the Inuit told him how. This is know-how that they have built up through long-term experience. They have twenty-five different names for snow, depending on its condition. This tells us something about how limited our capacity for innovation would be if we considered it only in terms of the possibilities each individual has. The key process at work here, in explaining the success of our species, lies in a particular human quality. It comes not from the individual but from the collective. This is the ability to accumulate knowledge across generations. For example, complex tools are never invented spontaneously. Rather, they result from the successive accumulation of changes and the cross-fertilisation of experience. In this way, knowledge builds up its own pre-requisites, its own stock of novelties. This is called 'cumulative culture'. Sometimes, a brilliant invention will emerge. But it never comes out of the blue. It requires the sharing of existing knowledge.

Social learning

Of course, we are speculating here about the original human societies. But the mechanisms we are talking about are so-called scale invariants. This means that they are constant over time and across human communities of all cultures. This is more true today than ever. It all starts with the ability to

acquire information by observing another individual. This is the mechanism of social learning. Many animal species share this quality: monkeys, crows and many others! But they do not all do it with similar effectiveness. Human beings acquire a technique by observing a fellow human being. They do so more quickly and more accurately than other animals, even the ones most akin to them.

Evidently, this process is massively helped along by the existence of articulated language. Indeed, language itself can be seen as the product of a cumulative culture. The production of syntax and grammar means that words can be combined to form extremely specific sentences and meanings. This greatly facilitates the transmission of information. No other species has this ability, or at least not with nearly the same complexity. And here we also get to a further factor, a recent discovery. The number of human beings involved in the formation of cumulative culture is its greatest asset.

Transmission by numbers

The rise of complex techniques does not simply owe to individual intelligence or social learning. The qualitative leap when the population doubled during the Neolithic period was not homogeneous: it did not all happen at the same time or in the same place. The emergence or disappearance of complex cultural practices was prompted by other factors. Which? We could not find the answer. The explanation finally came … through proof to the contrary! In other words, we could get a better understanding by investigating a specific case that illustrated a group's technological regression. At one point in its history, over 12,000 years ago, a community in Tasmania, the island just off mainland Australia, had both fewer and less sophisticated tools than it had in an earlier period. What happened in between these two moments? The prehistorians give a simple answer: this group became separated from other humans. The cause: the climate change of the distant past, and the rising waters which split one

territory from another. This led scholars to a new hypothesis. The technical complexity of a society is linked to the size of its population. This is a remarkable idea, and it has now been amply demonstrated.

The social-learning mechanism is, in any case, imperfect. This is even more true when we are talking about some complex technique. So the smaller the group, the greater the likelihood that the person with complete mastery of this technique would disappear. When this person passed on, so too did their knowledge – and the whole group lost it. Conversely, in a larger group, there was a greater probability of finding several people capable of grasping a technique passed on by some teacher. The number of people with the possibility of acquiring knowledge is, therefore, a decisive factor in allowing this understanding to be further transmitted, preserved and expanded. The same is true today.

Group innovation

Continuing with this line of reasoning also allows us to resolve another problem. The more knowledge is disseminated among a large number of people, the greater the likelihood that some new intellectual or practical use of it will emerge. Does the large number of educated people also play a role in new innovations? Surely yes. Innovations depend both on previously built-up knowledge and on the deductions made from it. But they also depend on the trial and error of learning, the chance results of action and sometimes bizarre experiments. In a larger group, there is more probability of any of these things happening. Archaeological observations confirm that there is a link between changes in the size of prehistoric populations and major changes in the techniques which they used. The larger the group, the greater the chances of doing better. And this is a lesson that could be applied to many different fields.

These discoveries are more easily corroborated by today’s science. We are now able to decipher the genetic composition of populations. This also

has a powerful side effect. The genetic diversity of a population's origins can be seen in its remains. The larger the population, the more certain we are of finding a population with many ancestors. Population geneticists have arrived at decisive results. They have made it possible to confirm that the advances in object technology visible in archaeological remains are connected to the density of the populations in question. Once again, this is all tied in with the number of human beings. Here we see how the capacity for social learning and the ability to create a successful cumulative culture are linked to the size of the human group within which they take place. Obviously, all this has given a particular, indeed decisive, advantage to the groups of humans concerned. We see this, for example, when it enabled them to occupy previously unused living spaces or gain access to new resources.

The force of numbers, and its emergent properties

This demonstration fully shows the value of a materialist view of history: for it is the intensity of social relations that produces human beings' intellectual wealth. This also allows us to deduce something important, in the era of extensive communication networks. Which is to say that there is a very high possibility that as information circulates among a human group of 8 billion interconnected individuals, it will produce a global cultural shift. Let us take a concrete example. Think of the time it took for the technology for making iron pots to arrive from Asia Minor to a beach in the Landes region of France, where such an item has been found. It took 2,800 years for this to happen. But this novelty would have spread in less than an hour in the age of Internet links and social networks. And, with the advent of 3D printers, it could have been manufactured almost instantaneously.

This overview of the formation of cumulative culture also allows us to consider the role which it might play in today's delicate moment. First of all, we can see how human knowledge is relational in nature. It is thus

firmly rooted in the sphere of material reality, where these relations are organised. Finally, we can see the importance of numbers in intellectual production, however individual this process may seem at first sight. Later, I will give a striking contemporary example of this, related to vaccines. All knowledge is the offspring of other knowledges. The conclusion: mass education and basic research should be freed from that logic which turns them into scarce, and therefore expensive, commodities that are increasingly difficult to share. Breaking out of this logic is a precondition for our species' survival, in the short time we have to find solutions to the pressing problems around us. The highest level of education and the widest dissemination and sharing of knowledge are the decisive means of guaranteeing our own existence, faced with the cataclysm which our mode of production is now unleashing.

4

The Noosphere

A global, total noosphere

The noosphere

The built-up stock of culture serves to impose a human order on reality – meaning that our activities can mould this same reality. In the early 1930s, the Ukrainian Vladimir Vernadsky, founding father of global ecology, coined the term ‘noosphere’ to refer to the body of culture thus far built up by human beings.[1] This means the sphere of activities of the human mind. Even before that, Vernadsky had been the first to propose the concept of the biosphere, and to define it. He had shown how biological life interacts with all the world’s geochemical events. Looking for a word that would encompass all the mental interactions at work in society, he chose ‘noosphere’. Since human thoughts are our primary form of interaction with the environment, they can be seen as a fundamental stock of understanding, to which everyone must have access in order to take part in this interaction. The noosphere encompasses everything we think. Here, I will draw on this same idea, and this same term. The Jesuit thinker Pierre Teilhard de Chardin adopted the word, and I have taken it from him.[2] But I think it is worth

pointing out that I am sticking with Vernadsky's version: I am not attributing to it any transcendental content.

The dominant culture

The noosphere is an emergent property of the myriad customs, knowledges, rites and conventions at work in humans' social and cultural universe. By 'emergent property', scholars mean a product of a combination of many factors, which none of them alone could have produced. This interface is crucial to each person, as it is what enables individuals to adapt to their social environment and to material reality. The noosphere thus has everything to do with the immanence of concrete life: that of everyday custom and practice. This pattern is, taken as a whole, that of an era's dominant culture. It includes the whole jumble of the most diverse prejudices. Here we are talking about all aspects of the dominant culture: it includes the scientific thinking of an era, its barroom clichés, and the smallest expressions of the dominant political ideology. It means the culture that gives rise to consumer tastes and desires, and in which needs and desires themselves are created, but also the culture consisting of all kinds of knowledge. This dominant culture is neither a simple 'reflection' of social relations, nor a colourful accompaniment to the dominant mode of production. As an interface between human beings and the surrounding physical world, it underpins the human condition throughout each stage of societies' history. The creation of this dominant culture is, quite clearly, closely related to the material conditions of each era. But this process also has a certain autonomy. For example, it brings together the ideas and questions of the present with the contributions made by the past. It is animated by the offerings of the arts and the movements of knowledge. But, without this interface, no one can take part in the world of social relations or behave in a manner intelligible to others. The stock of cumulative culture acquired over generations takes its place in this part of basic human

activities. It forms a global whole, a well of knowledge from which anyone can draw at any time.

Mens magna

In this day and age, it has become rather easier to acknowledge and understand the existence of this sphere of knowledge that is accessible in every moment. The noosphere is materially present among us.

The existence of digital search engines has familiarised us not only with the idea of a total, permanently available knowledge, but also with its everyday use. The gradual digitisation of all printed documents, which are increasingly collected together, has pushed home the victory of writing and printing over the narrators who used to recite from memory. The noosphere has become a digital reality embracing all digitised human thought. All knowledge from all eras is now gradually becoming available to everyone. It can be instantly drawn on, in order to help us think about or solve all manner of problems. With the first online artificial intelligence machines, the noosphere has entered the world of ordinary, concrete realities, no doubt also in a more decisive way. It makes scattered knowledge available in a new way. These machines are built around the principles of analogy and the plausibility of an assertion. They reproduce the essential mechanism of ordinary thinking – and make it automatic.

It is easy to see the new challenge that is now faced. The sheer number of human beings makes it possible to create the most intense cumulative culture ever known in history. But its accumulation in interactive, material formats, and its permanent increase by autonomous means and without any human intervention, change its scope. In the fifteenth century, Pico della Mirandola, the ‘founder’ of humanism, thought he had read everything and therefore knew everything. He was wrong even then but made this claim in good faith. But we must admit that it has become impossible for anyone, or indeed for humanity as a whole, to hope to read all the information

available in the digital noosphere and to cross-reference it all. All the world's efforts would not be able to master more than a tiny fraction of what is possible. This data also includes your use of a search engine to find out whether the supermarket is still open, or perhaps to look up scholarly papers on quantum physics. Some of this may seem insignificant, it is true. But, as statisticians are well aware, a billion pieces of trivial information put together can also produce very specific knowledge!

Megadata

In any case, this is what 'big data' is all about: developing techniques to cross-reference masses of data using computers' capacity for rapid automatic processing and calculation. This method can be seen as a first attempt at an automated reproduction of the cumulative culture which previously relied on the intelligence of large numbers of humans. It has already produced significant results. It can imitate certain human cognitive functions, such as vision and language, fairly well. It enables online retailers to predict your next order and others to charge advertisers a lot of money to find out what it will be. It has built tools for the instant translation of texts from hundreds of languages into hundreds of others. Some even claim that it will soon be possible to operate complex vehicles autonomously or to reproduce the steps taken by doctors, and their diagnoses. Whatever we think of each of these inventions individually – their usefulness, their social or ecological harmfulness or the way they are appropriated – we must recognise that they extend the exponential curve of new human inventions. Once again, this is basically a result of population numbers. From the number of human beings emerges the amount of information produced by humanity about itself. A new form of cumulative culture emerges from the connection of each individual with everyone and everything. We also need to understand the political issues at stake in all this, of course from the standpoint of our objectives. That means drawing

on all knowledge in the interests of political decision-making, in an age of uncertainty.

Ötzi's secret

In cumulative culture, knowledge itself is not everything. Again, let us look at some more material realities. The way in which we retain and conserve knowledge is crucial: it provides the basis on which it can be passed on from one person to another. We must first retain what we have learned, if we want it to keep evolving rather than disappear. The build-up of cumulative culture can only continue if there is some possibility of storing it. But the space and media available to do this are neither infinite nor eternal. These limiting factors have surely been pushed back very far, but not overcome entirely. For a long time, oral tradition was the sole means of transmitting knowledge. The limits of this form of storage go without saying. Its precariousness is inherent in the medium itself. Human beings are fragile. Ötzi certainly was when he was walking on the snows of the Senales valley, at an altitude of 3,210 metres in the Italian Alps. He was shot in the back with an arrow and died. Since Ötzi's body was well preserved in the ice, upon its discovery it was imagined that it belonged to a mountaineer who had gone missing a few years previously. But Ötzi had been there for 5,300 years. His sacred bow and a bag full of medicinal herbs allowed him to be identified as a shaman. He also had sixty-one tattoos inked all over his body. Nothing will ever be known about what the contents of his bag of herbs and his sacred bow were used for. But we think we understand what the tattoos were intended for. They are thought to be acupuncture points. Ötzi kept a visible trace of them in order to teach or memorise his medicine. He was himself a book, a deposit of knowledge.

A law of survival for information

Storing certain information outside the (perishable) human brain, even if this means jotting it down on one's skin, is itself significant. But what information needs to be preserved? In Ötzi's era, like our own, certain information is stored, reproduced and transmitted only if it is used enough to be worth keeping. The law of cyberspace is simple: information remains in storage if it is used. So what counts most is the fact that a piece of information is indeed being consulted. This is a banal truth but a crucial one. As information moves from one user to another, it either improves or deteriorates. If it improves, it will spread all the more effectively. If it deteriorates, it loses its usefulness and gradually disappears from circulation. Hence, the cumulative digital culture is always ultimately dependent on the number of exchanges of its content. Today, no digitised information is permanently stored. Storing it takes up space and its conservation consumes energy. Little by little, information can recede into the depths of online storage. Eventually, it disintegrates and disappears. Once again, the number of human beings is the key factor. The more people there are consulting it, and the more diverse the information, the more it is protected from disappearing and enriched through connection with other information, through the mechanism of consultation.

Killing information

Of course, the disappearance of this information is a product of human decisions. Everything depends on the rules by which things are stored, and the limits on storage. But this is not a merely technical question either. The storage of information can go on and on if there is a continual energy supply. But should this be unlimited? What should be prioritised, if we also have to limit energy production and use? There is no simple logic to this: information that is useless today may be crucial tomorrow. When it comes to knowledge, destroying everything that currently goes unused is not all that sensible as a long-term approach! And there is another issue here. What

should we prioritise conserving: the written word, sound, visuals, 3D content? Music, literature, painting, the visual arts, stock market prices, bus timetables? These are political questions. The cumulative culture is intimately linked to the way in which the human community operates. It cannot exist in separation from the community's own dominant priorities. It is the layer of thought that interfaces with the world. But its production and preservation are bound up with the techniques of a particular age. As a result, the political question it raises is formulated in different terms in each era.

Cumulative culture and its fragmentation

Another limit to cumulative culture is the borders that cut off its circulation, even within the human world. This story is not easy to tell and many of the pieces are missing. Since the nineteenth century, it has been the convention to say that history began with writing, and that what went before that was prehistory – a period at least fifty-four times longer. Was there already another form of writing on a perishable medium all along, like the cords of the Amerindians' *quipus?* We do not know. So history begins with the first written Sumerian tablets. They keep accounts of the numbers of sheep and bricks in the fourth millennium BC. Four thousand years later, the library of Alexandria had over 300,000 volumes – or so legend has it – retaining a vast share of the knowledge of antiquity on papyrus scrolls. But who really had access to this? At that time, and for a long time to come, access to the cumulative culture remained fragmented. It was limited by a kind of access code: you had to know how to read and how to interpret the messages. Then reading spread more widely, also because of the arrival of complex mechanisms and machines which themselves demanded a higher level of education. You had to know how to read operating instructions and orders, or how to count in order to organise the replenishment of supplies,

deliveries and so on. In fact, the oldest papyruses found in Egypt are summaries of this process, for the supply of cut stone blocks.

From one medium to another

But, to keep the existing stock of knowledge in circulation, another condition has to be met. It has to be transposable from one medium to another. It's transmitted from the brain to a sheet of paper via the fingers holding a pen. It goes from paper to a computer via a scanner. Then the file is transferred to other media: floppy disks, CD-ROMs, USB sticks, servers and so on. But two problems then arise. First, the use of all these tools requires a certain level of prior education, in terms of both operating machines and their internal ergonomics. Second, to keep this process going, the tools and media need to remain the same. But this often is not the case, as they are also subject to constant change. Over time, some information becomes unreadable. It disappears. This is a result of a change in tools, and it is not the first time it has happened historically. In the year 1000, the last known copy of Archimedes' calculations was carefully covered in white paint, on which beautiful angels were drawn watching over the Virgin Mary. Mathematics would take two centuries to retrace the steps taken by the ancient mathematician. What have we lost with the disappearance of the 3½-inch floppy disk that (almost) no one remembers?

Here, I hardly dare mention a news event from November 2021 that generally met with rather sorry indifference. It prompted a single paltry tweet of enthusiasm – one posted by me! Two capsules containing 100 billion copies of the Declaration of the Rights of Man and of the Citizen and Olympe de Gouges's Declaration of the Rights of Woman and of the Citizen had been made from a DNA ribbon.[3] This use of DNA for storage, rather than the previous paper or silicon formats, multiplied storage capacity billions of times over. As can easily be imagined, this transposition requires extremely sophisticated equipment. But it is also extremely useful.

More storage means less transposition. Today, 30 per cent of the total mass of data complies with the same standards and circulates without any system disruption. But this figure would fall to 2 per cent if it were not for the technological leap forwards to expand our storage capacity. In particular, the DNA method would make it possible to store the precious archives of unused, so-called ‘cold’ data. It could all fit in a shoebox, say the inventors of this first biological storage system. All this shows how the conservation of the material noosphere is a strategically important political issue for the human community. This is especially true now that we face a new dissipation of the noosphere, without this encountering the resistance which it ought to.

The monopolisation of knowledge

The digital commons

In the new automated production of cumulative culture, the emerging knowledge of megadata is being appropriated by private monopolies. Just a few companies are appropriating all the information that we produce. Google takes exclusive possession and use of all the information we give out when we use its applications. The same goes for Facebook, Amazon, Microsoft and Apple. Cyberspace is the place where the process of accumulating humanity’s cumulative culture is currently the most active, the most powerful and the fastest. It is thus also the site of the most ravenous intellectual monopolisation. Yet digital technology has also opened up possibilities for collectivism outside the sphere of the state. Wikipedia is the best-known example: the world of free software is full of many others. The idea of the ‘digital commons’ allows us to imagine an alternative way forward. This term can embrace all the actors in the

network when they are managed in common, as opposed to a system of private appropriation. This could include a public, nationalised sector. This should be the case for some essential physical infrastructure such as cables and servers. But added to this is the world of free software, which is neither state-controlled nor driven by profitability. In this field, we instead need to draw on the notions of sovereignty and of the autonomy of production.

But there is also something essential at stake in the field of intellectual property: data. Let us be clear on this point. This is not about nationalising the Big Five (Google/Alphabet, Apple, Facebook/Meta, Amazon and Microsoft). It is about ending their monopoly; in other words, about giving everyone access to the data collected in the digital network so that they can draw knowledge and useful applications from it. This freedom of access would apply to businesses, public services, associations, researchers, elected representatives and citizens, whoever they may be. To achieve this, all we need to do is change the data ownership regime. All data ought to be placed under a common property licence and thus be accessible to all. Today, the legal form of intellectual property under the World Trade Organization (WTO) is a straitjacket. It holds back the full realisation of the potential created by the activity of so many human beings in producing a cumulative culture. Now is the time to point out the danger, namely the current right to make the cumulative culture into a private monopoly.

The appropriation of knowledge

The Big Five are the most caricatural example of this capture at work. The commercial digital sector, which is increasingly concentrated in a handful of giga-companies, parasitises on the intelligence of the vast number of people. Aware of the power of global communities when they interact to advance knowledge, the Big Five themselves organise this cooperation. Their research departments collaborate extensively with academic researchers. Between 2014 and 2019, Microsoft published more than

17,000 scholarly articles. Of these, 78 per cent were co-authored by teams of researchers who do not work at Microsoft but at public universities. Microsoft has clearly understood the benefits of large-scale cooperation in producing new knowledge. But when you look at the patents filed, it's a different matter: only 0.2 per cent are co-filed with another entity! As for Google, 82 per cent of the published articles are co-written, but 0.3 per cent of patents are co-filed.[4] The big firms of intellectual monopoly capitalism feed on the intelligence of numbers and the activity of the global noosphere in order to appropriate and privatise it for themselves.

Is the noosphere the mother of ChatGPT?

Since the launch of ChatGPT, users have been able to chat to an 'artificial intelligence' machine about the weather, write a column about sports or politics, play chess or write haikus. The history of this technological achievement offers a good insight into the contradictory forces between the intelligence of the vast human population and the process of intellectual monopolisation. In 2015, a group of Silicon Valley billionaires set up a non-profit association called OpenAI – short for 'open artificial intelligence'. Hand on heart, they swore that their aim was to contribute to artificial intelligence research independently of the profit motives that had already made them super-rich. In their declaration of intent, they write, 'Since our research is free from financial obligations, we can better focus on a positive human impact.'[5] What an admission! They also promise, 'Our patents (if any) will be shared with the world.' The group included Elon Musk, the owner of Tesla, Twitter/X and SpaceX, and Peter Thiel, hedge fund manager and one of Facebook's first shareholders. All this goes to show that the rot set in right from the start.

Still, in the early years, they remained faithful to their stated principles. Through open, cooperative work, the OpenAI engineers and researchers developed the GPT-2 software. This is 'artificial intelligence' capable of

generating text that is almost indistinguishable from that of a human author, thanks to an algorithm trained on a large language model. In 2019, a month after GPT-2 was released, they put its source code online. This code can be read, replicated and modified by all the world's computer engineers. Within just a few months, it would give rise to hundreds of experiments, applications and various derivatives of the initial programme. The idea of making a chat with the GPT software and its design did not come directly from OpenAI but from this initial flurry of responses. Various programmers and academics have shown, with examples, how it was possible to train the programme on specific data, and thus create versions of it dedicated to certain specialised tasks in fields from medicine to literature, film, journalism, law and so on.

But, shortly after this, OpenAI was turned into a private, for-profit company. It signed an exclusive partnership with Microsoft, worth $1 billion. The source code for versions GPT-3 and GPT-4, released in 2022 and 2023, was to be a trade secret. Only OpenAI and Microsoft could see, use and modify the algorithm. Of course, even here they benefited (and profited) greatly from the immense wealth of previous experience and exchanges. But they now made it their own. And in so doing, they slowed down any possible advances in the field. Use of the GPT-4 programme is confined to the needs of Microsoft products: its search engine, its office software. All the other engineers around the world are prevented from understanding how the 'machine' works, from improving it and devising other applications based on it. The intelligence of numbers has been blocked by the rules of private 'intellectual' property established by the World Trade Organization.

The Bloom project

But the opposite also exists, even in the most advanced fields of the world of ChatGPT. Such is the case of France's Bloom project. It has created a

programme that uses artificial intelligence to generate texts that read quite similarly to human language, just as GPT software does. But there is also a major difference: the entire project is open, and every line of code is available to everyone on an online platform. This sends a clear message to all the world's researchers and engineers: help yourself and build on our advances to keep taking knowledge forwards at your own initiative. Bloom is now one of the largest language models, used worldwide. The original idea came from a company, Hugging Face, set up by three Frenchmen. They built an open platform for artificial intelligence developers. Fifteen thousand organisations, companies, universities, associations and public service providers, and 200,000 individuals, work together on thousands of application projects, publishing all their results, algorithms and data. For Bloom, the company has teamed up with the French National Centre for Scientific Research (CNRS) and the public supercomputer at Saclay, one of the largest in the world, with a computing capacity of 36 million billion operations per second. This is the most advanced experiment in what could be a noosphere freed from the domination of a single language. It is also free from a limit of the all-too Anglophone ChatGPT – that is, that of being based on just a single culture of reference. The US company trains on English-language data alone. ChatGPT uses automatic translation software when it has to respond in French. Meanwhile Bloom draws on data in forty-six languages. These include, of course, French, English, Spanish, Arabic and Chinese, but also Urdu, Wolof, Swahili, Lingala, Zulu, Catalan and Basque. The universality of the noosphere cannot mean standardisation under just one culture. Because uniformity is more of a threat to collective intelligence than even the best digital thinking machine could ever be.

Liberalism shuts off the lights

From this, we can see what fantastic possibilities there are to make knowledge available to all – and we can better appreciate quite how

despicable it is to stop this from happening. Withholding knowledge is a crime against humanity – for instance, the four decades of oil companies hiding their scientific knowledge of the disastrous climatic consequences of carbon-based fuel sources. But the lights of knowledge are all shut off when researchers' precarious social status limits their freedom to do their work, or when the absurd method of constantly making them submit grant applications undermines their long-term funding. We can say the same when concern for the short-term profitability of research is prioritised over the longer-term understanding of crucial questions. Or, indeed – more ridiculous still – when the tax credits meant for research are mainly provided to the retail and banking sectors. Putting the brakes on understanding, preventing the circulation of knowledge, making ignorance profitable: these are the material obstacles that neoliberalism creates. In this case, the political struggle takes on a different meaning. We are facing a kind of obscurantism, a shutting off of the lights of knowledge. This is what neoliberal doctrine means. It imposes complete submission to a pure superstition, namely belief in the existence of an 'invisible hand' of the market – the only force deemed capable of meeting human needs in all situations and with regard to all issues.[6] It is a dominant ideology, following others that went before it. Of course, this ideology serves the ruling class. But it is perhaps the most pervasive and dangerous obscurantism ever known. For if the ideas being professed are – as usual – a justification of the existing order, they take on forms and proceed by means that have rarely been combined and concentrated as intensely as they are today. This ideology takes hold through every channel, down to the marrow of the bone: it affects the way we act, our tastes and our behaviour. The drop in fertility, the decline in healthy life expectancy, the rise in epidemics transmitted by animals forced into close contact with humans – all these phenomena and many others are now relentlessly striking away at us. Scientists have identified each of them; they all have their answers. But

none of them is answered in a similarly rational way. Stubborn denialism and the triumph of liberal obscurantism have given us a glimpse of a new historical development: a belief that has not the slightest proof, which raises the possibility of a crisis in human civilisation in the form of a general collapse.

Patenting life

When neoliberal ideology dominates the field of knowledge production, it acts as the enemy of scientific knowledge. The private appropriation of the online noosphere is pushing back against the course that the prior history of human thought was taking. In the modern era, all knowledge was increasingly shared. Now, the free circulation of knowledge is fragmented, because of its private appropriation. This is a barrier to the cumulative effect of culture, which is at the root of all human civilisation. The noosphere that has finally become possible is fragmented by the private ownership of knowledge and of the financial takings from intellectual property. The widespread use of patents also creates this situation. This right of ownership over knowledge and discoveries has tripled over the last thirty years. We have seen a vast expansion of the fields subject to private ownership by patent holders. It all started in the 1970s. The United States began the wave of legislation regulating intellectual property. It started by gradually extending the periods covered by patents. You would be forgiven for forgetting that in France, for example, until 1959, it was impossible to apply for a patent on a drug. How long ago that seems now! Following the WTO agreements in 1994, the United States and Europe forcibly generalised the authoritarian use of intellectual property law. This affects even the most sensitive issues. Since 2001, more than 50,000 patent applications have been filed on genetic sequences, the fundamental building blocks of life itself.[7] In 2015, the European Patent Office accepted a patent on a tomato and a variety of broccoli. This is just the beginning. Demands

of many other kinds are being made, even asserting private property rights over entire living species. This is a crucial trend. It comes together with the development of a new form of capitalism that makes its living mainly from abusing intellectual property.[8] This can have terrible consequences. For example, when a company registered two patents on genes associated with breast cancer, it obtained the right to ban all research into these two genes by hospital and university laboratories. The tests produced by this company cost between $3,000 and $4,000 to use. Another example of the role that 'the market' plays in undermining the advancement of knowledge came when research into COVID-19 viruses was abandoned in France because there was no prospect of getting a product to market quickly enough. We should remember how a few private labs appropriated the work done on COVID-19 by thousands of researchers from public institutions. But the patents filed on the vaccines would end up forcing the countries of the global South to unnecessarily wait for long months before they got them. Hundreds of thousands of people died because knowledge was kidnapped by just a few.

Science as a commons

I did promise a contemporary example, to show that there is still just as direct a link between human numbers and cumulative culture in the twenty-first century as there was in the early days of humanity. We find this example in vaccines. The Chinese were practising an age-old version of smallpox vaccination from the eleventh century. It took several hundred years for the discovery to reach Europe, at the end of the eighteenth century. After that, it took another century for Pasteur to introduce modern vaccination. A hundred years out of 300,000 years of human history is a very short period indeed. In the nineteenth century, the dynamic of accelerating human numbers began in Europe. In the twentieth, medicine succeeded in identifying and isolating the viruses that cause certain

infectious diseases – a crucial step in vaccine development. The influenza virus was identified and isolated in 1931. The first vaccine was developed just thirteen years later, in 1944. This was a record for building up the knowledge needed to cultivate the virus in sufficient quantities, to understand the immunisation process and to manufacture an attenuated version of the virus, capable of creating immunity without triggering the disease, and so on. Obviously, if one scientist or even one team of scientists had to do everything from A to Z, this would take a very long time; there is even a good chance that they would never make it. Often, to solve a problem, you need a different point of view, through some encounter or an unexpected happening. To achieve all this in thirteen years, you need to have already reached a critical mass of people sharing their knowledge. In other words, you need several teams of scientists, in several countries, each with different relationships and experiences, capable of studying enough situations to unblock the problems faced.

Knowledge through numbers

In 2020, a new pandemic hit a world of 7 billion people. Its ‘SARS-CoV-2’ virus was isolated, and its genome was sequenced by Chinese scientists between the final days of 2019 and the first days of 2020. On 12 January 2020, they shared their results with the entire global scientific community. A year later, the first vaccines were available and authorised. It only took a year. There is no mystery in that. The world population is four times the size it was when the first vaccine was produced over the span of a century; the number of people capable of producing scientific knowledge has increased dramatically. According to some estimates, in the early months of the pandemic, twenty peer-reviewed scholarly articles were being published on the COVID-19 virus every day. Knowledge was built up at lightning speed, thanks to the force of numbers: there were more people, reading more articles, written from more diverse standpoints, and so any errors were

more quickly detected, problems were more quickly unblocked, and chance positive results were more quickly achieved. And so on. The large numbers set their own pace, also because the progress they made was not – initially at least – held back by the shackles of capitalist ownership. The decision by the first Chinese teams to publish all their results with open access was widely imitated by the global scientific community. The world's leading scientific publishers made access to all publications related to COVID-19 free of charge.

Of course, the harmful effect of private intellectual property came back in at the end of the chain. Big private pharma firms patented the recipes for the vaccines which were developed thanks to this global cooperation. In this way, they appropriated knowledge built up by thousands of scientific interventions, most of them the work of public universities from around the world. And vaccine production was deliberately rationed in relation to global capacity. The money immediately flowed into private pockets: that was what the collective effort of science was reduced to.

Free to learn

We have one hope of avoiding societies sinking into a war of all against all: our force of numbers. It gives us the opportunity to build and share new knowledge in a different and more reliable way, allowing us to face up to the new situation. The rise of the digital noosphere can be our ally in tackling today's, and tomorrow's, many ecological challenges. But to do that, we need to free the noosphere from its shackles: the absurd rule of private intellectual property in the hands of knowledge merchants. The stakes are all-important: these questions are at the heart of humanity's fight for its survival. Numbers can draw a line under capitalism. The force of adaptation that evolution gives to the human species has created extraordinary opportunities to accumulate the knowledges which it needs. The many projects in cooperation and in pooling resources are now leading

us towards a digital noosphere that promises either the worst or the best of outcomes, depending on who owns it. Will the human community or money prevail? We still need to conquer our freedom to learn and to know. To do that, we need to overcome liberal obscurantism.

5

Our Involuntary Servitude

In May 2023, a minister in Emmanuel Macron’s government called on the population to prepare for 4 degrees Celsius global warming by the end of the twenty-first century. Apparently, no one had told him what condition the world would be in by that point. But, if he is right, then human civilisation surely has no future. If we had imagined that, by now, all political sides would be taking the environment seriously, the minister’s intervention showed how limited such an understanding really is. Clearly, many are paying lip service to this crisis without reckoning with its real consequences. Political parties and their programmes thus continue to treat the environment as just one of a shopping list of issues. The authors of these programmes seem to understand neither the scale of the problem nor its urgency. Most of the time, they continue to think like they did in past decades when the world population was half, or a third, or a quarter of what it is today, and as if capitalism were still the same as it was in the 1960s. And yet the political equation of our time has changed completely.

Capitalism is inherently anti-ecological, and today neoliberalism is driven ever further into an authoritarian spiral. When society tries to resist the ecological and social disaster on which capitalist profits rely, neoliberalism will strike ever harder blows. The two things are now

inseparable: ecological and social devastation go hand in hand. Whatever the particular circumstances, the same greed prevails. Blind faith in the invisible hand of the market supposes that it will magically come up with the solutions to all manner of ills, including the ecological crisis. The same obsession drives the same relentless charge against social or ecological resistance. Faced with this outdated way of doing things, we need a comprehensive, well-articulated critique. This is useful for helping to build a majority popular force that understands the urgent need to turn the page on all this. This is a challenge to neoliberals, of course, but also to the traditional left. Both boast of their ecological bona fides while at the same time trying to align their rhetoric with the 'laws of the market'.

Ultimately, what we need is to create a new society, based on recognition of the inescapable need to confront the consequences of climate catastrophe. To do this, we also need to question the deeper links between our servitude – which may be an 'involuntary servitude' but often draws on some degree of consent – and a social order which is so at odds with the interests of our species.

Unsustainable capitalism

A spell over speech

Capitalism's responsibility in creating the ecological crisis is systemic in nature. Personal choices are not the essential factor, here. This is worth bearing in mind, even when we are talking about some investor who decides to finance production that is especially damaging for the environment. Of course, it is only right to do everything in our power to push back against such a decision. But, if some decisions are especially harmful, this should not be allowed to let the other, more routine, choices

off the hook. They all play their part in the disaster. They are all the result of the system's imperatives. In a general sense, the social relations of production as a whole form the mechanism that is driving the present situation.

One of the difficulties in raising awareness stems from the defence mechanisms that the supporters of this system have embedded in the collective consciousness. The market economy of 'free and undistorted competition' is not only a mode of production but also a dominant political narrative, indeed one that gets repeated at every opportunity. This vision of the world is presented as a matter of course, to which every society hoping for the good life must necessarily conform. Some have even cast this state of affairs as the 'end of history'. Its demands and its laws are presented as nothing but a force of nature. For many, we are still living in era of Margaret Thatcher's claim that 'there is no alternative.' Across the world, this is still the refrain of all manner of neoliberals and social democrats and their technocratic helpers. Of course, even shortly after that Thatcherite moment, the rise of the alter-globalisation movement revived both an intellectual and a practical critique of this model. In Latin America, alternatives began to emerge. Dozens of popular revolutions around the world rejected the social and ecological dead end that this mode of production drives us into. But, even then, we still thought we had time left to convince people and to turn things around. Now we have come up against an absolute limit. Two doublings of the world's population in less than a century, combined with a blind productivism, have created a situation incompatible with the survival of the ecosystem of human life. It is no longer possible to be anti-capitalist simply on ideological grounds. Today, being an anti-capitalist is a precondition simply to make reasonable preparations for humanity's survival.

Yet the story that capitalism just needs nudging in the right direction has not gone away. This system's direct responsibility in driving the ecological

crisis remains a blind spot in mainstream political discourse. It is as if the whole situation were merely the unfortunate result of a few ill-considered or inappropriate decisions. The systemic issue is rarely identified and blamed. At most, what gets criticised is the greed of this or that person or company. It seems that, if we went beyond this, the necessary conclusions would be simply too much to ask.

So it is worth explaining time and again why capitalism not only has harmful social effects but is also responsible for the ecological crisis as a whole. Here our argument – and the accusation that we level – will focus on the inner mechanisms of this system's operation; that is, its fundamental logic. This is a precondition for understanding the radical nature of our opposition to capitalism, and for extending its influence on a rational basis.

Bees have the proof

We could easily imagine that this crisis has an economic impact essentially because it is depleting the ecosystem's resources. We get a good measure of this by looking at the date each year upon which humanity runs into 'ecological debt'. This could be seen as an absolute limit for the capitalist market, since eventually it will no longer be able to supply its production lines. But this is not true of this system. This situation does not really contradict the rules of capitalism's inner workings. In fact, if a resource runs dry, then someone will surely be able to profit from finding an alternative. This provides an opportunity to invest and steal a march on competitors. This mechanism of gaining individual advantage – even against the interests of other capitalists – is completely the norm in this system. We see this in capitalist competition in general. When some investment allows for innovation or some new way of automating labour, it offers a comparative advantage to the initial investor. But it also lowers the profit rate for all those whose production methods will then have to catch up. When a capitalist is looking for alternative processes that might

generate new profits, they surely are not doing so out of their concern for others. So why bother trying to rein in the over-consumption of available resources?

I will take a striking example from agriculture. We all know what a crisis is in store because of the mass dying off of bees, mostly killed by the pollutants that land on plants. This is no mere detail for the biosphere or for the economy in general: some 35 per cent of the world's food production relies on pollination by these insects.[1] The same could be said of most of the plant species that produce almost all our food. It is easy to see what huge markets we are talking about here. It is also easy to imagine the alarm bells ringing for all those with investments in the agri-food industry and supermarkets. Yet there has been no such panic. For a market solution was not long in coming.

Everything can be bought and sold

A supermarket brand has patented pollinator drones that can replace bees. These drones will locate the flowers, collect the pollen, transport it and deposit it as required. These drones are also capable of checking whether fertilisation has taken place as intended. The inventors point out a further advantage: the drones, unlike bees, are also able to work at night. The financial pluses and minuses have been worked out already. Pollination by drone costs less than maintaining hives of bees and will result in higher fruit yields. So the market for this type of robot is already proving highly profitable, and several labs have already proposed models of their own. From a capitalist point of view, the disappearance of bees is good business at every stage. We can also think bigger in this regard. The entire biosphere can be reclassified according to animals' and insects' capacity to be put to profitable use. In a sense, this has already happened: a quarter of Europe's birds have disappeared without there being any political reaction. Today, there are more birds alive than ever before. But 70 per cent of them are

farmed poultry.[2] Profitable birds, as it were. There are 65 billion of them, and 23 billion are eaten every year after a short stint in a cage the size of a sheet of A4 paper. They are the world's biggest market for meat.

The use of robots for pollination instead of bees is no aberration. The idea of 'geo-engineering' has been gaining traction for some time now. Its aim is to make an industry out of repairing environmental damage. Capitalism claims to be capable of bringing rain, fertilising the oceans, taming tornadoes and so on. Hence, engineering is supposedly coming onto the market in order to respond to the failure of some element of the biosphere. Unfortunately, this offer also requires fossil fuels – and does not respect either biodiversity or the cycles of nature. It is also incapable of assessing its own impact on the other sectors which the ecosystem sets in relation. Instead, it places the consequences of its own actions on the shoulders of society – or leaves them to be addressed in some unknown future. In other words, when ecological disaster takes the form of the depletion of resources, this is no bad thing for the capitalist mode of production. Rather, it provides an opportunity. So why should it worry?

Capitalism without virtue

Of course, not all resources have been exhausted just yet. But all of them are gradually being depleted. This owes to inescapable physical factors, as we see with the limited available quantity of drinking water. The same is true when the damage is done gradually over time, for instance in the case of agricultural land that is left infertile. The extinction of animal biodiversity is a more general example of this process. But, as we all know, when it comes to investing and seeking profits, capitalists act individually. None of them is going to be driven to invest by a consideration of the general interest. Free-marketeer doctrine claims that the overall operation of the market will eventually reach an equilibrium. It is thus inconceivable that each individual capitalist is going to show self-restraint and avoid the

excesses that gradually produce destruction. That has to be decided case by case. But we should also try to understand how all profitability ultimately depends on offloading the environmental and social costs of production onto other shoulders. In other words, profitability relies on making society bear as much as possible of the costs connected to production.

For brevity's sake, let us just say this. Through social security or taxes, society takes on the costs of care for occupational illnesses, accidents at work, the consumption of junk food and the temporary or irreversible pollution of water, air or soil. If an individual investor decided to take on all these responsibilities, and pay for repairing the damage caused, they would instantly be driven under by competitors who did not act similarly ethically. This is also true at a more collective level. European pesticide manufacturers, for example, make a profit of €900 million a year. Making them pay for the €2 billion social and environmental costs for which they are responsible would put them out of business immediately.[3] Virtue – the art of behaving in accordance with the general interest – has no place in capitalist decision-making.

A destructive vocation

In addition to these spontaneous mechanisms in the capitalist system, another deeper process actively pursues destruction. This is not simply a matter of the mechanism that drives the individual capitalist to profit from a practice harmful to humanity as a whole. Rather, this is about a necessity inherent in the reproduction of the system itself. The capitalist system of production cannot settle for offering commercial solutions to the needs expressed by consumers. That would be too narrow a market for the means of production that can be mobilised. So this system must constantly prompt consumers to repurchase what they have acquired already. At the same time, it must also extend the bounds of demand by commodifying ever wider spheres of life. The capitalist mode of production is not a separate

‘something’, but a process. It is condemned to constantly accelerate the rate at which money circulates, as it turns into commodities and then into money again. It cannot allow this circuit to slow down without risking total collapse. This is the basic cycle of the capitalist market economy. This is why the system cannot settle for responding to needs as they arise in any given moment. It must constantly increase demand. To do this, it has to increase the rate at which products go obsolete, expand the realm of disposable items, manipulate commercial warranties, and uniformise consumer tastes and practices in order to expand the market for buyers of mass-consumption products. All of this systematically increases humanity’s predation on resources. Growth can never stop. Health, knowledge, leisure, the imagination – all these areas of human life are gradually being colonised by the commercial realm. This expansion of the sphere of profit takes every possible form. The most intimate aspects of life are targets for creating new addictions that will produce new captive markets, through taste and colour. This is how the capitalism of needs can constantly refuel itself: if someone is satisfied by some purchase, then the creation of a fresh desire can immediately demand another one. And so on and so forth.

Superficial needs

So one of the key focuses of the system of production is to manufacture new needs. We could call these ‘superficial needs’, as a way of emphasising that they do not often concern biologically essential questions such as eating, drinking and so on.[4] But the word ‘superficial’ has its limits when applied to a species like our own, given that culture, ritual and representation as a whole are so firmly rooted in the most basic human practices. It is easy enough to label wines or sodas ‘superficial’ needs, and then conclude that the myriad varieties on sale are just so many traps for the easily conned. But nor can we plausibly imagine everyone settling for just drinking water all the time. For social beings like humans, no need is really

just superficial – or else they *all* are. But the fundamental needs of this nature are each shaped by behavioural, aesthetic and social norms that vary from one era or country to another. They may be superficial in the sense that they help to satisfy our desires but are not essential to our existence. But we can also frankly recognise that it would be a little unrealistic to set out an ecological programme based on depriving people of everything but the basics for mere survival. So we need to put forwards other standards and other behaviours. We need to promote these, in order to replace the spirit of 'every man for himself' with that of harmony with the world around us.

Green neoliberalism

Between predation on existing resources and finding new ones, the market claims that it can fit everything together – and serve an eventual equilibrium. To use nature more 'efficiently', all we need to do is create a market for it. It is not hard: we just need to give nature a price. All sorts of tools are wielded to help bring about this market, which, as a result, remains highly artificial. The European carbon market is a typical example of capitalism's claimed solutions to the ecological crisis. This system has existed in the European Union since 2005. Every company can buy and sell rights to emit tonnes of CO_2. The invisible hand of the market is supposed to do the rest, reducing overall emissions by focusing them where they are most economically indispensable. For the moment, the main achievement of this system has been to encourage fraudulent speculation on a massive scale. Apart from the period of the COVID-19 lockdowns, greenhouse gas emissions have continued to rise. In fact, all this market does is make the right to pollute itself profitable. This failure has taught us nothing. Europe's neoliberals have extended this carbon market to products imported into the EU. But not too quickly. Not all sectors are affected, and free carbon quotas will be granted until 2034.

Offsetting the damage?

Another mechanism supposed to show that capitalism can organise its predation of the ecosystem in an ultimately beneficial way is so-called offsetting. It starts by attaching a market value to ecosystems. In particular, it sets a price for the capacity of some particular part of nature to absorb CO_2. On this basis, comparable values can be established. The looting done in one place is supposedly offset by another project said to have restored the ecosystem somewhere else. This can reach ludicrous proportions, such as 'offsetting' damage by planting monoculture trees on the other side of the planet. This system relies on some highly dubious assumptions. First, it considers all ecosystems to be interchangeable and all damage to be reparable. Second, the evaluation of the damage that needs offsetting takes place as if the whole chain of consequences of a problem that appears at some specific point were already known. This is obviously not true. But this sleight of hand offers a clear conscience to a model that continues to devastate the ecosystem. Indeed, it even promotes the spread of this model by absolving it of moral responsibility. But this is a ridiculous illusion. If a company like Shell had to 'offset' its CO_2 emissions while continuing to produce oil, we would have to plant trees on the equivalent of the entire surface of India. Unsurprisingly, claiming to solve a problem with the same methods that caused it in the first place brings us back to where we started. And that is a disastrous end point to reach.

Waste

Our tendency to believe that we are the masters of nature is a truly violent proposition. It has staggering effects. Since 2020, the mass of stuff made by humans has weighed more than all the world's animals and plants combined.[5] Pumping underground water has shifted the tilt of the Earth's axis. The mass of stones, sand and soil displaced by human activity is

greater than that resulting from all erosion mechanisms, such as wind and water. The plastic produced by humans weighs twice as much as all living animals. Seeing all this, does anyone still believe that all capitalist activity is a spur to progress, demonstrating the positive force of its imagination? And we should not forget the sheer quantity of stuff that is wasted and discarded. It is brimming over all around us, in an appalling mess. Often it is wasted because of a lack of customers, sometimes even in the presence of outright destitution. For the market cannot operate without also organising a sphere of deprivation. Even when this reaches the most shameful levels, producers never hand out free food to those in need. They demand financial compensation from the public purse. In France, unpurchased foodstuffs are given free of charge to ‘anti-waste’ sales and food aid groups. But this only happens when the government subsidises supermarkets not to throw them away.

Authoritarian liberalism

Freedom in the liberal programme

When Emmanuel Macron was elected president of France, the media bubble enshrined him as ‘a true liberal’.[6] By this, they meant that he would apply a capitalist-inspired economic policy but also retain an open stance protective of our public and individual freedoms. What is the result? Under Macron’s leadership, France has become a global example of police violence and of government abuse of power within what is still called a democratic system. France’s new legislation on the repression of demonstrations was condemned by the United Nations and the Court of Justice of the Council of Europe. It was, however, hailed by the Chilean far right and indeed by authorities in Hong Kong, who wanted to import it to

deal with demonstrators there. It is worth stressing how much this neoliberal government is – violently – fighting for its survival, not only against traditional mobilisations by organised labour but also against environmental movements and their activists. These latter have been subjected to spectacular violence, accompanied by all kinds of abuses of power and violations of civil liberties. There have been collective bans on demonstrations – and even the outlawing of groups labelled ‘eco-terrorists’, because they oppose the rearing of rabbits in overcrowded cages or the vast-scale privatisation of water in rural areas. The government is incredibly brazen, rolling out the same arguments over and over in order to avoid discussion.

Against freedom

This government has already been condemned by two court rulings for its inaction on the climate and failure to implement its own legislative decisions on the subject. By calling for a pause in EU legislation on environmental protection measures, liberal president Emmanuel Macron has aligned himself with the demands of the right-wing and far-right climate sceptics in the European Parliament. This after having negotiated the recognition of gas as a ‘green’ energy, in exchange for the same classification being awarded to nuclear energy. This irresponsibility, this sheer cynicism, are the worst plagues of our time. France is a large and powerful country whose decisions affect a wide area. In situations of distress, all these lies, subterfuges and silences come at a high price, because they prevent debate and rational decision-making to deal with the urgent problem. This takes us to a common misunderstanding about (neo)liberals.[7] Of course, their political rhetoric is full of appeals to freedom. But it is not immediately clear that their concern is solely with the freedom of capital, even if this comes at the cost of all other freedoms. When you listen to them, sometimes they even sound like libertarians. They

say that freedom begins outside the world of rules, which are always too ‘rigid’, not ‘flexible’ enough, and always putting shackles on human energies. So we need to ‘free ourselves’ from this ‘straitjacket’. Basically, the rules are so many obstacles to the free play of the market. For them, this is a serious matter: it is about the market’s ability to create the spontaneous equilibrium that is good for society. The subliminal message is clear: if the market is free, then the market society it produces will be just as free. Experience shows the opposite. Economic liberalism does not increase our freedom and cannot do so. It necessarily reduces it.

Enemies of the state

According to free-marketeer ideology, the sum of self-seeking actions by individuals – the market – is the only way to allocate wealth efficiently. Only the addition of these interests on the market can amount to a real general interest, in accordance with the desires of each individual. In this view, the state is incapable of making a similarly efficient decision, for its decisions are inherently ideological. Public spending is therefore an enemy. Naturally, this rhetoric is mainly for propaganda purposes. In reality, ‘investors’ savings’ love to invest in government debt, because only the state can be relied on not to disappear. Investors love state orders to the private sector because the state is the most powerful of all buyers.[8] Only government orders allow planning for the medium and long term. In any case, in France, the state remains the country’s leading investor. Meanwhile, private investment is steadily declining, despite shareholders’ ever-rising share of profits.

In reality, the behaviour of the spokespeople for (neo)liberalism, in France, Europe and elsewhere, proves how little they believe their own outward arguments. They are constantly calling for costs to be outsourced and borne by society. Time and time again, their lobbies work to secure laws and regulations hostile to alternative forms of ownership such as

cooperatives, mutual societies and pay-as-you-go social insurance systems. They are constantly trying to eliminate competition from public services which are more efficient than what the private sector has to offer. There is no longer any question of liberating the energies that are supposedly hemmed in by regulations. Rather, they want to use a dense thicket of regulations to hold back any forced alternative to their own way of doing things, the results of which are so damning. This operation relies on strong-arm tactics to impose their grip on European societies. In the aftermath of the Second World War, these same societies had got to know quite different criteria for sharing wealth – and believed in the central importance of the general interest.

Macron: a global example of what liberalism does not mean

France's Fifth Republic was born as a crisis regime, meant to regulate decolonisation and reorganise the forms of post-war French capitalism. But its Constitution now serves new imperatives, and Macron's liberal regime has even hardened its mechanisms in this sense. The imperatives in question are linked to the reorganisation of financial capitalism and the French social order. The executive shamelessly abuses all kinds of provisions allowing it to assert its authority and bypass the legislative branch. One recent case was when a bill raising the retirement age by two years was declared to have been passed, without parliament ever getting to vote on it. This was done against the opposition of millions of demonstrators, all of the trade unions and 90 per cent of respondents in opinion polls. Even worse, in 2024, Macron refused to recognise his defeat in the early general elections which he had himself called. Given France's history, this is a head-on confrontation of principles. For the French republican tradition, in the words of the 1789 Revolution, 'the freedom of each individual ends where that of others begins.' This indicates a whole way of doing things. Freedom has to be demonstrated in practice. The

conditions in which it is exercised are thus essential. Basically, it boils down to the ability of each individual to make a decision freely and to be able to pursue it freely. But, obviously, this is only possible if different freedoms are combined in a serious, well-organised and freely deliberated fashion. This calibration of freedoms thus always relies on politics to arbitrate between the different priorities expressed by society. Neoliberalism always arbitrates in the same way and to the benefit of the same people. Next, it sets out to 'maintain the order' thus established. Then it develops a vast new market for tools of repression.

Of course, given neoliberalism's ambitions for remoulding society, the ill-treatment of trade unionists continues apace. In several countries, we have seen the mutilation of protesters becoming a fully-fledged tactic for frightening opposition. With the Gilets Jaunes movement in France, the count stands at thirty-two people who lost an eye, and five who had a hand torn off. Since then, the armed police have adjusted their targets. At least three demonstrators against the pension reform had a testicle amputated. An atmosphere of intimidation has set in. Fasttrack convictions, the jail terms (and not just suspended sentences) for 800 Gilets Jaunes, a flood of fines against peaceful demonstrators, nights in the cells for thousands of people protesting against the pension reform, and the deployment of surveillance drones at every turn. All this is something unique in a democracy. This is already causing public concern abroad. Now, little bands of far-right thugs are adding their own violence and their own marches. This is all taking place under the indulgent gaze of police forces that – if the polls are to be believed – are overwhelmingly in favour of far-right ideas.

Where are the eco-terrorists?

But now the same viciousness is targeted against environmental activists, who are getting a taste of methods previously reserved for terrorists. The comparable repression speaks volumes about the capitalism of our time. In

France in 2018, anti-nuclear activists were prosecuted for ‘criminal association’ and their lawyer was subject to an illegal raid. A gendarmerie intelligence unit was set up to hunt down people whose only crime was whistleblowing against the mistreatment of animals on factory farms. In 2021, dozens of lawsuits were brought against campaigners who had symbolically taken down the president’s portrait from town halls. Yet there was – at the time – no legal obligation to display his image. In 2022, a military video surveillance system was discovered in the garden of an opponent of the ‘mega-reservoirs’ drinking up underground water in the Poitevin marshlands. In this case, the authoritarian slide broke new ground. A farming industry already gorged with subsidies could also rely on an expensive police presence. The protests would have had no violent consequences if the government had not deployed 3,000 police and gendarmes to ‘protect’ a simple hole in the ground and the pipe used to fill it with water. This turned the demonstrators’ march through the fields into a warlike exercise in ultra-violent police repression. According to the police authorities themselves, more than 5,000 dispersal grenades were fired – almost one each for the 6,000 demonstrators there. The result, unfortunately, was hundreds of injuries and dozens of serious mutilations. One person’s life hung in the balance for weeks afterwards. This extreme state violence has captured global attention, and the United Nations has raised a specific warning over the French government. These examples are striking because they concern a country, and especially a political leader, widely imagined to be defenders of freedom. But shame is no barrier, and, sadly, the political development of several countries in Europe shows as much. Broad parliamentary alliances are forming to unite traditional centrist and right-wing parties with the far right. They meet in the warm embrace of an anti-social, anti-ecological, fully-fledged neoliberalism.

The bourgeois bloc

In France, this union has confirmed the concept of the ‘bourgeois bloc’ coined by political sociologists.[9] This term points to a convergence of political forces whose economic programmes conform to the free-marketeer approach – added to the quest for a good position in the global competitive rankings. This formula now unites the various, and now complementary, elements of the right: its traditional national wing, neoliberal centrism and the far right. All three are part of the space of opinion moulded by neoliberal society. Its chosen watchwords are ‘freedom’ in the sense we have just seen, and ‘law and order’, which is of course always presented in terms of personal safety. By extension, this forms an all-encompassing discourse. The words produce a set of references, the first consequence of which is to institutionalise the forms of social discrimination resulting from the overall operation of the market. Following an entirely traditional method, the trio immediately work to ‘naturalise’ the most intolerable forms of discrimination. This naturalisation of discrimination draws on an already widespread palette of stereotypes. First is the ‘racialisation’ of social status; that is, attaching ‘temperaments’ to skin colours and assuming their connection to a given ethnicity, religion, morals and a questioned legal status. The far right serves as a guarantee that this operation will be pursued with some vigour. Its presence normalises the effort to divide working-class communities along the lines of the (now unashamedly repeated) criteria of skin colour, religion and dietary habits. It is then necessary to heap blame on the victims of this system. The ‘centrists’ take care of this part. Hence, unemployment is said to be the fault of the unemployed, sickness is the fault of the sick and poverty is the fault of the poor. Even without the media having to put in too much effort, this allows for an explicit division of society, in the deepest and most lasting way possible.

‘There is no such thing as society’

Ultimately, this is the best way of promoting the ‘correct’ reflexes to ensure that society will accept the further spread of discrimination. Right wingers’ job is to place discrimination in a long national tradition. In 1954, the death of a homeless woman led to a national outcry. Now 2,000 people die on the streets every year, but we are struggling to draw attention to the issue. An injured policeman brought the entire National Assembly to its feet in tribute. But 600 people die at work each year in France – the country which holds the European record for accidents at work – without this stirring any emotion among those in power. This is the world view once promoted by Thatcher and today dominant among the world’s neoliberals. As she put it, ‘there is no such thing’ as society. Only individuals exist – and if they are left free to advance their own personal interests, then they will improve society as a whole. Whatever social ills they suffer are merely proof of their lack of determination or else their incompetence. This justification for a fragmented society serves as a distraction, and as a barrier to action, by hiding away what is really happening. Yet, today, we face universal threats: the unravelling of the global ecosystem and all manner of nuclear danger, especially at a time when total war is returning to European soil. These threats call for a response utterly at odds with this dismal story of looting society. They demand a thorough and in-depth education in the rules of solidarity and mutual aid, and the behaviours that go with them. This is needed not only on moral grounds, but perhaps even more so because it is the most effective way to cope with the challenges now looming on the horizon.

Tipping point

Given the tensions that we can already see on the combined social and ecological fronts, it seems unlikely that we are about to see a softening of state violence. At every point in the chain, this mode of production is at odds with the survival of the ecosystem within which it operates. We can

already see how unsustainable it is. The scientific community is closely watching a series of planetary limits invisible to the naked eye. These have been identified as thresholds and tipping points that we have to avert, unless we want severe upheavals in the ecosystem. But many of these limits have already been passed. The first and best known is that we have already exceeded the limit for the sustainable quantity of CO_2 in the atmosphere. Climate change is already upon us. The latest report from the Intergovernmental Panel on Climate Change (IPCC) leaves no doubt in this regard: this change is also irreversible.[10] Let us be clear about what that really means. Everything is going to change, and nothing will ever be the same again.

Six out of nine

Taking the planet as a whole, six out of nine tipping-point red lines have been crossed already. In addition to climate change, several thresholds were already crossed some years ago. But now everything is accelerating. In 2022, it was officially reported that two further thresholds have been reached. The first regards the freshwater cycle. Soils that have been degraded by agro-industry and excessive construction can no longer absorb or hold water. The second is a new chemical age in which we have arrived. Between 1930 and 2000, production in the chemical industry grew by a thousandfold. Some 350,000 different types of chemical products are freely on sale. They are everywhere – and end up being haphazardly mixed together in rain and run-off. This produces dangerous cocktails – sometimes meaning eternal ones – the composition of which remains a complete unknown. They contaminate everything: air, water, soil and even living organisms themselves. Once again, researchers have done the maths. Here they included a new criterion for judging the effect of breaking these limits: the health of living species, including humanity itself. In other words, as well as studying the thresholds beyond which the ecosystem's overall

stability is jeopardised, they explored the consequences that this will have on living things, in terms of depleted resources, forced exile and epidemics. This is, after all, a problem of whether we can preserve the only ecosystem compatible with human life. But the results do not look good: seven out of eight limits have already been breached.[11]

Denial of reality

Capitalism and liberal authoritarianism are thus locked in a total denial of a reality which they ultimately consider less dramatic than we do. The warnings no longer work. We saw this when the International Energy Agency (IEA) turned the IPCC's observations into concrete targets for the energy industries. Meeting the goal of limiting the global temperature rise to + 1.5 degrees would require 'no new oil and gas fields approved for development in our pathway, and no new coal mines or mine extensions' after 2021.[12] The capitalist reality is quite different. Worldwide, we can count some 119 pipeline projects and 477 gas pipeline projects in the works. That is enough to circle the Earth eight times and twenty-four times respectively. And that is not to mention the 432 new coal mine projects.[13] So we are facing a completely new landscape. On the one hand is a society that offers its scientific and political diagnosis and expresses its determination to act, through all its official international bodies. On the other is an out-of-control economic system which imposes its own priorities, regardless of other considerations. This situation raises a political question. What legitimacy do the decisions of each of the two have? It is not hard to identify the oil industry's vision of sovereignty: it acts in the name of private property rights and the freedom of the entrepreneur, as conceived at the end of feudal society and the beginning of the capitalist era. The other actors whom I have mentioned instead intervene in the name of the general human interest, combined with the protection of the ecosystem. Their kind of reasoning necessarily implies a new hierarchy of

political norms. They place the general human interest at the top of this hierarchy. But, implicitly at least, they are also bringing into play a new type of property: the common good of humanity. A clash is unavoidable. This surely has some features in common with the confrontation between capital and labour over the last two centuries. But it poses it in new terms, widening the meaning and the real stakes of this confrontation. In its own way, it establishes a concrete human people: one poisoned, asphyxiated and denatured by a mode of production that is individually profitable and collectively suicidal.

The failure of social democracy

The grand coalition sets the tone

Hailing from the political horizons of the last century, the parties rooted in the long-standing socialist and green traditions retain a morbid relationship with the ideology of market society. Sometimes they remain directly embroiled in the blind productivism of old-school socialism and state communism. It is thus worth rigorously examining the political programmes that they offer to citizens, and which explain how their future might be organised.

I have just set out our reasons for rejecting the neoliberals' project of endless capitalist growth. Our criticism is targeted at the productivist element inherent in this system. We should thus reject any programme that ignores the need to break with this logic. This includes the old left, as represented by the policies of the social democrats and greens, as well as the parties who have made up Germany's coalition government since the 2021 elections. There, the neoliberals who call themselves the Free Democrats govern together with the world's most powerful social-

democratic and green parties. Their political friends all over Europe are following in their footsteps.

A paralysing contradiction

After the collapse of state communism, the socialist movement born of the industrial era has been mostly centred on the social-democratic parties. Heirs by default to this movement, these parties have never been able to surpass their original sphere of action. They have stuck to the strategy of obtaining certain advances within a national capitalist system, never imagining anything else is possible. This is in their DNA. Depending on the country, these parties either were creations of the early trade unions or – when the parties came first – themselves created these unions. Their framework back then was building the forces of labour and negotiating the workers' share of profits within any given field of production. In that era, social democracy said that by 'sharing the fruits of growth' it would correct the inequalities that were tearing society apart. Those with the least would be given the most. But this leads to two dead ends. One is political. Limiting redistribution to the expected future surplus does not challenge the dominant position of those who have already accumulated vast wealth. But more decisive was the second. This programme assumes unlimited growth in a world that has already reached its limits, and it is already drowning in a totally unrepayable ecological debt.

Obsolete social democracy

Social democracy's commitment to the 'laws of the market' has everywhere transformed it into a zealous destroyer of the social gains for which it once fought. Many thus accuse social democracy of betraying its own historic programme. They denounce it for doggedly applying measures wholly at odds with its own promises, for instance in France under François

Hollande's presidency (2012–17). Yet this does not really get to the heart of the issue. Even if social democracy were to return to its old programme, it would still be obsolete and unsustainable. Where social democracy once governed in most of the countries of Western Europe – the region where it was first established – today this movement has collapsed in most European countries. Its former working-class base has moved away from it, because it was unable to bring about the political rupture needed to halt the deterioration in their ecological and social living conditions. Some such parties look for other ways to win them back: the Danish Social Democrats, for example, are shamefully lining up with the far right's anti-immigration positions. But perhaps the problem is that this political camp is unable to question its own productivist framework. Can it imagine a sustainable combination of social progress and defence of the ecosystem? This is what the so-called 'radical' left has chosen to do. Wherever social democracy exists today, it is confronted with the need to make this same shift. Otherwise, it will become merely obsolete – and disappear as a political form.

Winning in our heads

The Anthropocene

'Anthropocene' is an important new addition to the global vocabulary of recent decades. While it offers a useful framework for thinking, at first it did not have much success in day-to-day politics. I started using it in my campaigns in 2010, earning me a few (not always friendly) comments. Of course, I had borrowed it from debates in the scientific community. The word 'Anthropocene' was coined in 1995 by the late Paul Crutzen, a Nobel Prize winner in chemistry. It makes human beings into the authors of a new

geological era. The consequences of our activities have now made their mark in the layers of the Earth's crust. No one will ever be able to sweep away the residues of nuclear waste or the layers of plastic that have been laid down. The value of the word – and of the scientific consensus around it – lies in the principle of responsibility that it establishes. It has gradually asserted the existence of humanity as a political subject. Humanity is not just the sum of its peoples and nations. It is more than that – and this can be seen concretely when the material results of human activity physically mark the planet in the manner of a geological force. But we also see this when the activities of each individual change the living environment of all of us. The word 'Anthropocene' establishes a responsibility not only towards the planet but also towards the human species and biodiversity in general. The political consequences on a global scale remain to be seen. When a new diplomatic approach is decided, this is clearly the challenge that it has to meet, perhaps supported by a group of nations interested in a new ecological world order.

A spell over humans' social existence

This term has surely given rise to various instructive discussions and disputes in the political sphere. For my part, I will stick with 'Anthropocene' – first, for convenience's sake, since this term has been officially endorsed by the scientific community; second, because this word has the merit of naming the culprit. I do not agree with those who argue that we must not say that humanity in general bears any responsibility for the situation. For me, the specific political responsibility of the world of production cannot erase the responsibility of the enthusiastic voluntary servitude of human beings as consumers.

If human beings have rather questionable consumption habits, then we can justifiably say that they bear some responsibility for the destruction of the ecosystem in the interest of these habits. After all, they consume, and

they are conscious subjects. The motives behind productivism would not have any material effect, if it were not for a human inclination to accept or even desire its products.

But this poses other problems. We should first consider how these behaviours are inculcated in society as the norm. There is surely nothing spontaneous about this. As we know, this is an organised activity, and a highly profitable one at that. Its considerable resources could be devoted to quite different purposes. Today, if the advertising market were a country, it would rank eighth in the world, ahead of the national budgets of Canada, Brazil, India and Australia. Even amid the COVID-19 crisis, seven out of ten Big Pharma companies worldwide spent more on advertising than they did on research and development.[14] No one can imagine a curtailment of all this activity without seriously endangering the economy as a whole. After all, it plays a vital role in the system. If the source of accumulation is the exploitation of labour, the result is not achieved until the product is sold on to the consumer. Through their purchase, the consumer makes the profit contained in the commodity into a reality. Their role in the process is thus essential. Otherwise, unsold commodities just become so much waste – another burden to deal with.

Inclusive values

All these advertising efforts evidently carry a far-reaching message. They set the standard for what is beautiful, useful and desirable. They showcase a world that we can only access by appropriating it for ourselves – that is, by buying more stuff. In this context, the consumer is not simply a mouth to feed. It is true that consumption is rooted in the needs and desires satisfied by the objects that we purchase. But it also integrates us into the overall system of social and cultural relationships in which it develops. Quite obviously, the appeal of a given object will vary according to the time, place, customs and standard of living of the people concerned. So we can

easily see that the use-value of a commodity has another important function beyond its utility per se. For it also has an effect of social inclusion. Fashions and tastes come into play here when they are reflected in our choice of purchases. But here we also express our attachment to behavioural and moral injunctions, to prejudices, as well as our consent to authority when it sets out what may or may not be legally used. I could cite many other such parameters. We can see how behaviour that is socially approved of, recognised by others and felt by each person as positive proof of belonging to the community, itself provides a source of satisfaction. This is the inclusive value of an object. This is not to forget the attached qualities that are also often on sale: a yoghurt may also sell the promise of slimness, a toothpaste dental care, a chicken 'free-range' living conditions, a vegetable a model of 'organic' agriculture and so on. Consumption brings into play a broad range of socially recommended motivations which thus also have a powerful effect on social inclusion. This same process could serve quite different causes.

The consumer's fault

Consumption is thus part of the process of building social relations. To recognise this fact is another way of reminding us that humans are social beings – and therefore necessarily cultural beings. In other words, they develop their social relations in the context of a system of symbolic representations. This immediately creates the concrete conditions of sociability. Humans simply do not know how to act outside this system. Consumption is a source of comfort also in this sense – a substantiation of our relations with others. In a sense, consumption fulfils the social production of lived reality. The objects around us are something more than their use-value and their exchange-value, for our intellectual universe also grasps them as objects of thought. When it expresses our desire for these objects, it gives them a relational meaning. Whenever we consume, this

also has consequences for how we see ourselves. The commodity casts a spell over whoever purchases it. It is emblematic in this sense that the world's richest billionaire is a Frenchman, Bernard Arnault, who rules an empire of luxury goods. The price of his products also defines their clientele; that is, one dedicated to buying markers of ostentatious consumption.[15] So we should not underestimate commodities' role in making people feel included in a community of meaning. You might as well imagine that a plate painted by Picasso has most use-value in the kitchen.

Differentiated responsibility

I said earlier that humans' questionable consumption habits give them a measure of responsibility for the plundering of the ecosystem. Of course, not everyone is equally responsible. The proof: in absolute terms, the country that emits the most CO_2 is China. But, when we look at the numbers per head of population, China's 1.4 billion people rank far, far behind the top polluters: the inhabitants of Qatar, the United Arab Emirates, Canada, Saudi Arabia and the United States. In short, the richest 10 per cent of the planet is to blame for over half of carbon emissions.[16] Emblematic in this sense is the troubling fact that 1 per cent of the global population is responsible for half the greenhouse gases produced by all aviation worldwide. Ultimately, breaking the spell of consumerism is a political necessity. But, while this goal is indispensable, there is no chance that this will work if it is a moralising and punitive endeavour. By definition, such change demands social consent. It must consciously develop its own symbols and achieve democratic support. So let us be clear: the ecological and social change we need goes hand in hand with a change in the hierarchy of norms, but also with a change in the principles and behaviours of social life.

Globalitarian

We should not underestimate how far the contemporary era has shaped the way people develop. Each of us is now deeply interdependent, as part of various social mechanisms that we do not choose and are often unable to do without. They all feed a docile servitude, which is itself deeply rooted in the material organisation of society. This is especially true when there is such a clear determination to step up government control by all possible means. This includes a constant tracking and monitoring of individuals, in order to suppress behaviours deemed at odds with the overall functioning of society.

I would characterise the world we live in today as ‘globalitarian’. This word is made up of the adjective ‘global’ and a suffix which points to its necessarily totalitarian character.

The word ‘totalitarian’ means something more than ‘authoritarian’. The latter refers to a way of managing society and individuals that abuses authority in the violent service of power. But ‘totalitarian’ refers to a model that reaches into the more intimate dimension of life: tastes, the imagination, thoughts and behaviours. ‘Globalitarian’ refers to a closed world, one in which people have to adapt to given objects, in contrast to age-old practices pulling in the opposite direction. This is a world in which the ties between individuals are broken and society is fragmented by their irrevocable integration into a prefabricated sphere of obedience and consumption. Violence, in this world, no longer just means the violence doled out by governments, or only the crudest blows and wounds inflicted on individuals. It is a violence in every moment, when the only way to *be* is to *have*, and everything else is scorned.

The need for rupture

The deadline

Back in 1972, the Club of Rome's famous Meadows Report pointed to the risk that the economic system would collapse under the impact of environmental changes. At the time, production was doubling once every ten years. Today the scale of the ecological and climate crises, and their irreversible nature, are upsetting our relationship with historical time. We now have only a limited time to try and change course. We have to make far-reaching changes within short deadlines. For the first time since the earliest critiques of capitalism, the debate between reform and revolution has been rendered obsolete. That is no longer the issue. An objective element has now come to the fore: the timescale within which we must act.[17] This deadline changes the meaning of political decision-making. It has to recognise the possibility that misjudging the time frame for action will cause irreparable damage. This is quite unlike the idea of a political time that is forever open to possible futures. Political action has to change its fundamental assumptions. The philosophy of the spirit of the law has itself been overturned. The moral force of the law, as opposed to dogmatic truth, lies in its flexibility: if it fails in its objectives, we can change it and make another rational choice. But how is change possible if we have no time to act, even on different bases? We are entering into a different world. The law thus needs to tighten up the assessment of its impact and constantly check what results and side effects it is really having. The law is a modus operandi. Hence, the ever-growing importance of democratic pressure, of votes, of contradiction, of the ability to change decisions or to propose new ones.

If inaction is a mistake, we know what the penalty will be. That is something we do know already. Every degree counts. At a 4-degree temperature rise – a level that the French government is sure we will reach – half of humanity will run out of water. These billions will try to flee to countless other places, which will in turn become unliveable. The entire organisation of society will be jeopardised by the individual moments of

disruption mounting up in a general collapse. We even have a map of what the world will look like once the rising seas and oceans have swallowed up thousands of islands and vast areas of land, including megacities. The countdown has begun.

The break

The advance of climate change and the destruction of biodiversity mean that the choice of gradual, *à la carte* change comes at much too high a cost. Today, climate scientists and physicists are talking like cold strategists. In 2022, the scientific journal *Nature Climate Change* published an article signed by a host of climate scientists.[18] They explain, 'Conventional interventions are simply not fast nor deep enough to slow climate change and build climate resilience; instead radical interventions are required.' They add that 'radical' must mean 'deep and transformational change'. They cite the 'root drivers' of the problem in 'capitalism and materialism, asymmetrical power relations and lock-in of exploitative and extractive systems'. For these climate scientists, breaking with market ideology is not an ideological option. It is a necessity if we are going to take action to break the deadlock, in an orderly fashion and while keeping as much control over events as possible. The neoliberal option instead produces a *Mad Max* scenario. The disruption of society under the devastating effects of climate change will spare no one and no social category. No politician can leave it to their successors to repair the perhaps irreparable damage caused by their inaction. This raises the question of a new paradigm. This paradigm must take account of the situation that we have described, the social basis for change, and its programmatic demands.

6

The Rights of the Species

A popular ecology

The ecological crisis is always also a mistreatment of society collectively. But rather less attention is paid to the ecological impact of this mode of production on humans as a species. You would think that they were not animals too. It is as if all human life did not depend on fundamental biological needs. Still, I would suggest that this is a useful angle to help us understand the radical nature of the changes we need. What other more effective or more direct way is there to put us on the spot – and force us to act – than to see this as a problem for the species? Can we really haggle over our right to breathe or to drink, for example? There, I have deliberately chosen two of the most basic human needs. These needs are invariant across cultures, across social classes and from one era to the next: ones that can kill you if they are denied. These fundamental requirements of the human species could be turned into a kind of charter of human ecological rights. This chapter proposes this approach as a way of entering into the critique of the current human condition, based on a few examples not often cited in political debate.

Human and non-human

We all know how, most of the time, abuse of the environment and abuse of society go together. Working-class neighbourhoods are hit hardest by pollution. The worst-insulated homes are the cheapest, and therefore occupied by the poorest. Waste is dumped and stored in the lower-income suburbs and much less so in affluent city centres. Scarce water is rationed and reserved for industry and productivist agriculture. Water shortages, polluted air, noise: suffering these living conditions is a kind of house arrest, to which people are socially condemned with little chance of reprieve. We see how, in most cases, ecological and social mistreatment go together. If there were an ‘ecological class’, it would, first and foremost, consist of working-class neighbourhoods, where the crisis is killing people – slowly, but still much more quickly and cruelly than in more protected social circles that are less directly exposed or better able to defend themselves from shortages when they hit. In these conditions, people’s interests relate directly to the general human interest. When we give the ecological battle a social foundation, we are orienting it towards that same base of people among whom it can and must find most support.

But we have not covered all the necessary ground just yet. We need to go beyond a vision that sees human beings as separated from the biosphere by their singular and remarkable status. Thinking about human beings within their ecosystem, first of all, means reconsidering their needs as an animal species that has a stake in a global biosphere. From this point of view, defending humans’ ecological needs and defending bees amount to one and the same thing: preserving the biosphere as a global biological system. For the first time in political history, this popular ecology also encompasses non-human interests. Sometimes it even integrates the interests of ‘living environments’, in the broadest sense, when these form an inseparable whole for the species living there. The starry night or shared sound spaces, air

quality, eating and drinking – all these things are the commons for animals and plants. They are thus also a largely common issue.

The night

Light pollution

It was in the middle of the 2022 presidential campaign. Thousands of people had gathered in Toulouse, for a campaign rally in the pink city's magnificent central square. At one point in my speech, I started heading into a rather unexpected digression. I had already been thinking about it for several weeks, and I did not want to finish the campaign without addressing the theme of the fundamental rights of human life. So I started talking about … the night. 'What kind of world is this? Do you know that a quarter of humanity no longer knows what night is?' My comments on the importance of the night were well received, and I was pleasantly surprised by the number of people who came to talk to me about it afterwards. I was also pleased to see that some of the new La France insoumise MPs decided to introduce a bill on this same subject. Surprisingly, they came not just from one type of area, but from the suburbs, the countryside and the city centres alike. But this subject is still not really seen as a political or social issue. Indeed, it has not drawn much attention at all among decision-makers. But it should do! A quarter of the Earth's surface is permanently lit at night. Artificially, of course. This is no small cultural change in human life. Early groups of humans acquired the ability to learn from their observations of the night sky. From this they could make mathematical and scientific conclusions. The stars in the night sky offered an early, nomadic humanity the key to a future over which it had some control. Knowing the right

moment to sow or harvest freed them from their apprehension over the changing seasons; they no longer had to fear losing everything.

The luxury of the stars

A dark night has already become a privilege, reserved for an increasingly small circle of people. In Europe and the United States, 99 per cent of the population no longer lives under a starry sky.[1] Artificial lighting shuts out what the poet Corneille called ‘the dark light that falls from the stars’. From Paris, it is possible to make out no more than thirty or so stars. Yet 2,000 to 3,000 are normally visible to the naked eye in each hemisphere. The disappearance of night from human life is only just beginning. Light pollution is currently increasing at a rate of more than 2 per cent a year. An astrophysicist warns in one article, ‘Today, a child born in a place where he can see two hundred and fifty stars at night will see only one hundred by age eighteen. We are losing one of the oldest common legacies of humanity.’[2] But not everyone is doing so. For while some are losing all their darkness, others are losing none at all. The map of this phenomenon illustrates the contours of a social geography.

Nights of struggle

This provides a further illustration of the fact that, in human civilisation, times and rhythms become social realities. Thinking more about this, we feel the urge to regain control. The ravages of permanent daylight lead to a kind of permanent time difference. This itself relates to social time and to the forms of domination on which it is based. It certainly concerns the 4 million employees in France who work at night: one in five workers and twice as many as in the early 1990s. In Europe and the United States, a quarter of employees are affected. Night work increases the risk of sleep

disorders, mental illnesses, metabolic disorders and cardiovascular disease. It also encourages the development of certain cancers.

‘For women who have worked all night long, the risk of breast cancer is significantly increased, by 40% compared to those who have never worked nights.’[3] Finally, people who work nights get an average of one hour less sleep. Daytime sleep does not have a similar restorative effect. It is fragmented and disturbed by light and noise, especially when homes are poorly insulated. There has also been another kind of decline. In the space of a century, the average sleep time has already fallen from ten hours to six hours and forty minutes. More than three hours less. Without any reaction. And what about sleeping conditions? One form of discrimination is piled on top of another. In France, nearly a million people are crammed into studios or one-bedroom apartments with multiple inhabitants. How do they sleep? This has an especially tough impact on children. Growth hormones are secreted exclusively during sleep. The World Health Organization has shown that sleep deprivation in children has serious consequences for the development of their nervous system and memory. Do our decision-makers not care about children being deprived of restorative sleep?

Some 85 per cent of mainland France is affected by excessive levels of night-time light. Unsurprisingly, urban lighting in large cities causes the highest levels of pollution, making the Milky Way invisible. Fortunately, there are groups everywhere campaigning for the lights to be switched off. In some cases, they are switching off the illuminated signs in clothing, toy and DIY stores, which no one is seeking out at two o’clock in the morning. In other cases, they mark out spaces that need to be kept dark at night in order to ensure peace and quiet for locals. The right to the night becomes a focus of struggle in an age when vast numbers of people are massed under the eternal lights of the boundless city.

The right to darkness

Light pollution appeared on the international scene in 1992, when the United Nations Educational, Scientific and Cultural Organization (UNESCO) declared this a matter of general human concern. Its Declaration on the Responsibilities of the Present Generations Towards Future Generations stated, ‘The present generations should ensure that future generations are not exposed to pollution which may endanger their health or their existence itself’.[4] Thirty years on, this is still far from accepted or even understood. Nevertheless, the issue has made headway in international bodies. In 2020, the head of the United Nations office responsible for the preservation of migratory species declared, ‘Natural darkness has a conservation value in the same way as clean water, air, and soil.’[5] Basically, the only animal without day or night is the high-frequency trader, for whom high-frequency financial speculation on the Internet never pauses. The right to darkness is a fundamental human need. And in our inner mental life, it is also the right to the first germination of thought – and our right to enjoy the protection of the shadows.

Background noise

The bio-acoustician Bernie Krause has spent his life listening to the sounds of nature. Over thirty years and 5,000 hours of recordings, he has memorised 15,000 different animal species. His findings tell us in no uncertain terms: in half a century, half the sounds of nature have disappeared.[6] Rachel Carson warned decades ago that the massive use of pesticides was silencing the spring by killing the insects on which birds feed.[7] No worms, no nightingale song. Nature is now going quiet everywhere, all year round. But it is not that we are immersed in the reign of silence. Far from it. The clanking of metal, the creaking of gears, the roar of motors all cover everything in a permanent background noise. Noise is

another of the characteristic pollutants of our age. The invasion of all frequencies by human noise prevents nature from making itself heard. Many of the noises generated by human activities occupy frequencies that correspond to many animal calls. Ultimately, this noise is also playing an active part in the sixth mass extinction and in the destruction of biodiversity. The human species can no longer hear itself thinking either. Neuroscientists are clear on this score: silence is a fundamental physiological need, essential for the regeneration of the brain. Noise pollution is a leading cause of psychological and physical disturbance, even ahead of air pollution in some places. Above fifty-six decibels, each ten-decibel increase in exposure translates into a 30 per cent increase in the risk of heart attack.[8] We would do well to think about this, given that cardiovascular problems are the leading cause of mortality worldwide.[9]

The cost of noise

Officially, one in five Europeans is exposed to harmful noise pollution, as are one in three Americans.[10] We can only think how many others suffer the consequences of poorly soundproofed housing, congested urban thoroughfares or airports too close to their homes? In France, the noise of police sirens wailing day and night was deliberately turned up during right-winger Nicolas Sarkozy's presidency. In some cities around the world, this is compounded by the din of horns honking without pause, day and night. This adds to the already unbearable atmosphere of city life as experienced by millions of people unable to do anything about it. Of course, the main problem lies in the mode of production. Two-thirds of noise damage is caused by transport – and, within this category, two-thirds comes from road traffic. This is the consequence of the 'just-in-time' production system, with its batches of lorries on the road at all hours. This is the price of the endless spread of individual vehicles that have become indispensable. Then there is the *coup de grâce:* the 9 per cent of noise caused by air transport. All in all,

Europeans are estimated to lose at least a million healthy years of life every year because of traffic noise. The WHO ranks noise as the environmental factor causing the second most damage to health in Europe, just after air pollution. It affects one in five European citizens and is responsible for 12,000 premature deaths every year. Yet it hardly even gets mentioned. France bears the brunt of this scourge. Nine out of ten people living in the Greater Paris region suffer from noise pollution levels that exceed the WHO-recommended thresholds. According to estimates for 2019, the average resident [of the Île-de-France region around the French capital] will lose one year of healthy life as a result of noise exposure, and up to three years for people living in the noisiest areas,' notes the director of Bruitparif, a body responsible for measuring noise pollution in this same region.[11] The social cost of noise in France is estimated at some €147 billion every year: more than the cost of smoking. But that is just a price tag. For people's lives, it is real hell.

Privilege

Silence has become an incredibly rare commodity. Over 22 million workers are exposed to potentially harmful noise each year in the United States; more than half of them report not wearing hearing protection.[12] A third of people are regularly exposed to unhealthy level of noise.[13]

The nine out of ten French people who think that silence has become a privilege are not mistaken, either. Here, once again, these figures conceal a class dynamic. For example, half of so-called sensitive urban areas – in other words, neighbourhoods riven by social inequality – are affected by a 'noise black spot'; that is, noise exposure above regulatory levels. Poor insulation often also means that noise is leaking in too. This disruption affects every aspect of social reality, from the classroom to production. The result is that a million young people are struggling at school because of noise. It is easy to see why noise is the number one cause of pollution cited

by people living in poor neighbourhoods. Half complain about it, compared with a quarter in other residential areas. But these complaints are ignored, and so little is done in response.

The right to silence

In France, the right to silence is set to become a far-reaching battle. 1,637 town councils, including forty-five cities, have been forced to implement noise abatement plans.[14] Standards do exist, and they can be applied to all manner of everyday situations. This is simply a matter of ensuring compliance with WHO recommendations on danger thresholds. Road noise should be no higher than fifty-three decibels during the day and forty-five decibels at night. For primary school children, the WHO recommends a noise level not exceeding between thirty-five and fifty decibels during learning time. Reclaiming the right to silence should soon become a demand for urban environments nationwide. As for workplaces, there is an urgent need to limit the use of open-plan offices where many people work side by side. They are like a straitjacket of sound locking people in – with the noise. More generally, we need to start tracking down the sources of noise and start soundproofing buildings, particularly schools. In 2022, the UN sounded the alarm about noise.[15] The UN body responsible for environmental issues considers noise pollution a growing threat to public health worldwide. Many cities around the world have long since surpassed acceptable noise levels. This UN body's main recommendation goes beyond simply reducing noise. It advocates the creation of 'positive soundscapes such as tree belts, green walls, green roofs, and more green spaces in cities'.[16] These will absorb sound, let the great orchestra of life be heard again and allow silence to benefit us all.

Air

The air is unbreathable

After a maximum of five to ten minutes without breathing, the brain will be destroyed. On the agenda of life, breathing is the absolute priority. It is the first thing a newborn baby does as it enters the world. But if you want to keep on breathing, you have to make sure you are not inhaling just any old thing. The body needs oxygen. Not fine diesel particles, asbestos, sulphur, coal or anything else. And yet we do breathe in all these, in large quantities. No fewer than 9 million people worldwide die every year as a result of air pollution. One in six deaths is directly attributable to polluted air![17] That is almost three times more than at the start of the twentieth century. This makes air pollution the number one environmental risk factor for premature death and disease. That is three times more than deaths from AIDS, tuberculosis or malaria. Exposure to fine particles and other air pollutants is responsible for 75 per cent of these deaths. Every year, unbreathable air causes the premature deaths (that is, before age sixty-five) of almost 7 million people worldwide. Whether in terms of health care spending, the loss of productivity or the right to life itself, this pollution has an exorbitant social cost. And let us not forget its considerable financial cost – and I mention this simply because today this seems to be the yardstick by which everything has to be judged. In 2019, air pollution cost the global economy $4.6 trillion in deaths, incapacity to continue work, asthma, chronic respiratory diseases and reduced life expectancy.

Breathing has become a luxury

But, here again, not everyone is in the same boat. Breathing clean air has become a luxury. This is especially true when we look at this in global terms: over 90 per cent of premature deaths linked to air pollution are

centred in the poorest countries. India, Pakistan and Bangladesh are the worst affected. As is so often the case, an essential good that comes under threat quickly becomes the object of speculation, and the shabbiest of commerce. In India, one of the most polluted countries in the world, access to clean air comes at a high price during episodes of pollution. For some years now, a new type of bar has been offering flavoured shots of ‘pure’ oxygen! Bourgeois families in New Delhi pay top dollar to live in residences where the air is filtered, and to send their children to schools where the air is pure. Who can blame them? The question foreshadows the false alternatives that this new discrimination puts before us. Who can really be blamed just for wanting to live? Nestled within this is the only question that really counts, here: at what price? But we can also ask another question: how can we save everyone, without exception, from all this?

Indeed, the simple act of breathing has become a new marker of social discrimination. You have to be able to afford an air purifier. The cheapest ones cost seventy-five dollars. Yet 60 per cent of Indians live on less than $3.10 a day. So, for most people, buying an air purifier would mean going without everything else for three weeks. And then they have to pay for the electricity to keep it running. At the end of the day, it is obvious: what is the point of eradicating pollution, when the people who sell the ability to breathe are making a fortune? The purifier market is booming. According to estimates, it is set to grow by 35 per cent over the next few years. Europeans, in their lazy contempt for the rest of the world’s ills, are oblivious to the big, deadly cloud that has come along to suffocate them. Parisians cannot smell the German coal whose clouds hang around in their atmosphere. They cannot smell it because it is already too mixed in with the diesel particles from traffic. These are being firmly combated – with all the vigour of a class struggle. Hence, it was decided to impose a ban on poor people in their cars, which were a generation or two behind the times. A compulsory ban in forty-two towns and cities across the country! Next will

come gas masks. Their use is already reported in coastal areas: in the West Indies, where people are affected by sargassum washed ashore, spreading hydrogen sulphide. So, too, in Brittany, where locals are affected by toxic green algae. Maybe these are just extreme cases. We always start by reassuring ourselves that.

Struggling to breathe

The air we breathe is an issue that has long gone neglected. But in France, it is actually the origin of the division of Greater Paris into a working-class east and a bourgeois west. The prevailing winds in this region used to push factory fumes from the west to the east. Even today, lower-income neighbourhoods are located directly next to industrial zones or incinerators, such as the one in Ivry-sur-Seine, a working-class town just outside the capital. This environmental discrimination has been scientifically established by scholars working on the subject. For example, if the immigrant population of a town increases by 1 per cent, there is a 29 per cent greater chance that a waste incinerator, which emits various types of pollution, will be sited there.[18] Funds for sorting and recycling are earmarked for the neighbourhoods of inner Paris, while the suburbs are left to deal with the burning of the capital's rubbish.

Of course, transport is the primary cause of air pollution. Airparif, the body that monitors air quality in the region around Paris, records the highest concentration of pollution in Seine-Saint-Denis, the poorest *département* in France. Six motorways run under its inhabitants' windows, as many interchanges and expressways, used by 200,000 cars every day. The Porte de Bagnolet interchange in Seine-Saint-Denis is the most polluted point in the Île-de-France region. And 35,000 people live near this concrete octopus. Above their heads are the air corridors of the huge Roissy and Le Bourget airports. Sometimes overcrowding adds to the difficulties. It causes dampness in homes, which are also often poorly ventilated. This dampness

undoubtedly causes skin diseases. We are often less aware of the respiratory damage. But it is there. A study by the French Economic Observatory (OFCE) shows that people living in overcrowded homes are 40 per cent more likely to report poor or very poor health.[19] There is a systematic cause and effect here. Researchers have done the maths: in Paris, the poorest residents are three times more likely to die from an episode of pollution than the wealthiest residents are.

In Marseille, the city's northern districts (the *quartiers nords*) – the most emblematic working-class neighbourhoods in France's second-largest city – are the hardest hit by pollution from ferries. The wind also blows the fumes from the cruise liners' huge engines directly onto them. Each cruise ship docked in the port of Marseille emits as much sulphur in one day as a million cars.[20] For the children of the poor, it is a double whammy: they are vulnerable both because of their age and because of their parents' social situation. In Marseille, more than 500 schools and crèches – six out of ten – are located less than 200 metres from areas where air pollution exceeds legal limits.[21] In Paris and its inner suburbs, 85 per cent of schools have pupils breathing air polluted at levels above World Health Organization recommendations.[22] We can do much better, everywhere. There are convincing examples from the metropolises of the global South. In Medellín, Colombia, for example, the first 'metro-cable' in Latin America was opened in 2004. Bolivia saw the construction of the La Paz cable car, the longest urban cableway in the world; over 200,000 people use it every day. Not only is this low-pollution public transport but it has allowed journey times to be cut by at least 20 per cent.

The right to clean air

As clean air ceases to be something we can expect, it is also being demanded as a global public good. There is no lack of proposals for international law in this regard. At the COP27 summit, the islands of

Vanuatu and Tuvalu, a hundred Nobel Prize winners, the World Health Organization, 2,000 scientists and 1,800 civil society organisations proposed a treaty on the non-proliferation of fossil fuels.

One urgently needed measure is a ban on short-haul flights. In addition to CO_2 emissions, aviation also pollutes the air with fine particles. Such travel can be quite easily reorganised on a different basis and put under control. On average, travelling by train emits at least ten times less CO_2 than making the same journey by car, and up to fifty times less CO_2 than flying. But the truly shameful figure is this: 1 per cent of people are responsible for 50 per cent of the world's aviation emissions![23] These are the users of private jets.

Water

Soon there won't be any more …

René Dumont, the first Green candidate for the French presidency, was seen by many activists of his generation as a creature from another planet. During the French presidential election in 1974, wearing a red jumper and thick square glasses, he appeared on television, holding a glass of water, to warn that soon it would start running out. At the time, he garnered only 1.32 per cent of the vote. But he was right. Half a century later, the water crisis is with us. It is a great regret of mine that such causes have often gone overlooked. So I began my own presidential campaign in 2022 with an 'augmented reality' rally on the theme of the crisis in the water cycle. This followed on from a series of visits related to this subject and even the organisation of a citizens' vote in which 300,000 citizens backed the idea of nationalising this resource. This rally did not have much real impact; the issue was not yet ripe. Since then, fires and water shortages in entire

villages have opened many people's eyes. It does not take long to take stock of the situation.

By 2030, half of the world's population will be living in regions facing water shortages. That is a huge number of people, and 2030 is almost upon us. Half the world's lakes are running dry. Global warming is disrupting the water cycle. Just one degree of warming will lead to 7 per cent more evaporation, and therefore just as much extra rain. Phases of intense drought and devastatingly intense rainfall are soaring. Worldwide, 2 billion people have no secure access to drinking water. Six billion have mobile phones, but only 4.5 billion have access to toilets. The situation is so bad that the UN has created a World Water Day dedicated to the deprivation suffered by half the global population. The indifference is shocking. Nearly a million people die every year from diseases spread by dirty water: cholera, dysentery, typhoid fever and so on.

Water as a social crisis

This global crisis threatens every living thing. Without water, there can be no agricultural production, no industrial activity, no society and no ecosystem. But, most importantly, three days without being able to drink water is enough to kill us. Having 2 per cent too little water makes us thirsty, a 10 per cent lack of water makes us delirious, and 12 per cent makes us dead. Obviously, everyone, rich or poor, will be affected in the end. But some – the poorest – will be affected first, and harder. In France, the 2 million people who have difficulty accessing drinking water are in this situation because of mounting bills. There are also 300,000 people in mainland France who are most directly cut off from running water: the homeless. But the first people in our country to be affected by the global water crisis do have a roof over their heads. They are the inhabitants of the French Overseas Territories. In Mayotte and French Guiana, one person in five has no tap water, or even a source of water in the garden. In Martinique

and Guadeloupe, the networks are dilapidated, and half of water is lost through leaks. For years, the taps have run dry on a daily basis. As for the quality of the water, the fact that it has become so soiled is also ground for capitalism to make it into a commodity. In fact, 90 per cent of the country's waterways are contaminated by pesticides, and microplastics can even be found in tap water.[24] So if you want to drink safely, you have to pay for filtering devices or buy bottled water. Social discrimination is adding to the water crisis.

Monopolising blue gold

UN secretary general António Guterres has spoken eloquently of the causes of the water crisis. On 22 March 2023 he declared, 'Vampiric over-consumption and overdevelopment, unsustainable water use, pollution and unchecked global warming are draining humanity's lifeblood, drop by drop.' So the root of the problem is in the logics of accumulation and commodification. Through its productivist development, capital has created the conditions for a disruption of the water cycle. But, as is so often the case, finance is now feeding a second time on the damage for which it is itself responsible. The increasing scarcity of water resources promises it a windfall. A handful of multinationals are getting their hands on the blue gold. Water markets are particularly juicy. In the United States, 15 per cent of the population rely on private wells for drinking water. In France, water network management is dominated by three multinationals. They operate mainly in the major cities. Admittedly, only 30 per cent of town councils lean on this private management. But they cover 60 per cent of the population. The result for households? A private tax on water. Running water managed by a multinational is generally at least 30 per cent more expensive than water managed by a public authority.

Hogging resources

When private forces are not privatising the taps, they are directly monopolising the water tables. This is no side issue. It is even the cause of an imbalance that has tipped the Earth's axis. The deterioration of water networks as a result of heavy underinvestment is forcing people to buy water. Coupled with intense advertising, this produces an extremely profitable model: the bottled-water industry. But it is also extremely destructive. This global market is also highly concentrated, as three corporations together have 76 per cent of the market share. This is also the case in France. In the Puy-de-Dôme region, dozens of towns and businesses are subject to drinking-water restrictions to avoid a general shortage. Everyone … except Danone. Its subsidiary Société des eaux de Volvic has acquired the right to continue pumping a quarter of the water from the water table in order to sell bottled water at 100 to 300 times the price. For six months of the year, there is no longer enough water flowing in the taps or rivers. And this water sold at such a high price also contains microplastics.

Finance, a friend of fire

Stock traders are thirsty too. Water is becoming a speculative asset, and this has the most excessive consequences. In 2019, as a result of the drought, Australia was ravaged by terrible fires. Six million hectares went up in flames, an area around the size of Ireland. These mega-fires now occur every year. Researchers at the University of Sydney estimate that 400 million people are affected. In the state of New South Wales, a third of the koalas have died. Above all, the Australian bush – the basis of a forest ecosystem that is unique in the world – has been burned down to the roots across large areas. What can be done about this? How about putting out the fire with water? But there was not enough water to fight the spread of the fires. The reason for that? In Australia, any private actor can acquire quotas for the use of available fresh water. Shortly before the fires broke out, 89 billion litres of available water had been bought up by a Canadian pension

fund. The purpose was to irrigate fields of almond trees in order to finance funded pensions. The improbable circuits of financial internationalisation have detached this resource from its immediate ecosystem, where it ought to have played an essential role. Finance has been the friend of fire.

Mad Max

California has also had the same privatised water quota system since 2014. Creating a water market as a response to increasingly frequent shortages is a rather stupid invention – and one that is dangerous in every way. Only a small clutch of profiteers benefit. The functioning of the market has the absurd effect that the scarcer the resource, the more expensive it is. When water runs out, the price goes up. Hence, only the very rich have access to it. *Mad Max* brought this to the big screen, while free marketeers have brought it into real life. California has now gone one step further by authorising water derivatives. In other words, speculation on water. Speculators can buy litres of water several months in advance and sell them several times over before a single drop of water is actually in a pipe. This method has already been used for several decades by agricultural exchanges. Crops are bought and sold several times over before they are even sown.

Such movements make agricultural prices worldwide more volatile. The main effect of this financialisation has been to trigger a sharp rise in the price of basic foodstuffs in many countries. In 2008, this led first to food riots in poorer regions. Soon, we will have thirst riots, not because of a lack of sufficient water, but because of social discrimination in how water is used. This was in fact how the citizens' revolution started in Bolivia, with the 'water war' in the city of Cochabamba. The powerful should beware. A correlation between the arid climate of 1788 and the revolution in 1789 has been established.[25] More than that: the residents of the areas where the

drought was sharpest expressed the strongest demands for institutional change.

Conflicts over use

In France, the battle for water has crossed a new threshold. Its availability has fallen by 14 per cent in twenty years. The result is conflicts over use. Who has the right to use water, and for what? One sector is particularly water intensive: productivist industrial agriculture. It does not produce to feed the French population, as it claims, but rather the ‘world market’. This reaches absurd dimensions: French maize is exported to feed Chinese battery chickens, while we import soya from Argentina, which is just as water intensive, to feed our own chickens. A cow drinks 170 litres of water a day, even apart from water needed to grow the maize to feed it. In total, it takes almost 15,000 litres of water to produce one kilo of beef. In a context in which drought and drought-like conditions become the norm, starting each April, access to water is becoming a vital issue for this sector. To answer this problem, it is rolling out a new strategy: building mega-reservoirs. It is simple in principle: a reservoir is a hole up to fifteen metres deep and the span of ten football pitches, covered in plastic to make it watertight. In winter, the reservoirs are filled by pumping water from groundwater and rivers. In summer, this privatised water is used to irrigate the fields.

Never mind whether, according to the IPCC, these ‘reservoirs are costly, have negative environmental impacts and will not be sufficient under higher warming levels in every place’.[26] Never mind whether this risks drying out the areas where these basins are built. Never mind whether it drives the salinisation of water tables in areas below sea level. Never mind that half the water stored in the open air evaporates before it can be used. Never mind whether, under the scorching sun, this stagnant water encourages the proliferation of bacteria. In the western French *département* of Deux-

Sèvres, tension over these reservoirs has reached an all-time high. It is easy to see why: while they are 70 per cent funded by public subsidies, the reservoirs will only benefit 6 per cent of the farmers locally. This means that each resident is, in effect, paying €300 out of pocket a year, just to be deprived of the equivalent of the *département*'s total drinking-water consumption.

The right to water

Faced with these developments, the right to water is already demanding attention as one of the most pressing social issues of our time. Thanks to a resolution passed by the UN General Assembly on 28 July 2010, 'the right to safe and clean drinking water and sanitation was "recognized" as a human right that is essential for the full enjoyment of life and of all human rights'. A referendum in Uruguay in 2004, which was prompted by a popular-initiative campaign, saw a 64 per cent vote to enshrine the right to water in the Constitution as a human right. In 2023, the country saw its first demonstrations for the right to water, at the height of a historic drought that revealed the government's unpreparedness and inaction on this issue. Ecuador's 2008 Constitution describes water as a human right, for life and for consumption. But here, the right *to* water is supplemented by the rights *of* water. Nature is itself considered a subject of law. In November 2016, Slovenia became the fifteenth country in the world, and the first in Europe, to enshrine the right to drinking water in its Constitution and formally ban any form of privatisation.

La France insoumise has also made the right to water a priority. It calls for this right to be guaranteed by the Constitution, insisting that water should be managed entirely by the public sector, preferably at the town council level and, in any case, at the drainage basin level. This is, indeed, an urgent necessity, and involves an extensive amount of reorganisation. This right to water can only be a reality if it can rely on effective planning. This

is why I have proposed overhauling the French regional structure to bring it into line with the geography of the country's drainage basin. This will give concrete meaning to the planning of interventions at all levels of the water cycle and will drive greater efficiency. Here I am talking about extracting, distributing and purifying water. But that is not the last of the issue. Urban planning must also be included in this picture in order to curb the artificialization of land. The cultivation of forests is also involved, as forests are an essential link in the water cycle, and one which can be controlled. And, of course, it is also necessary to maintain and refit the entire piping system for distributing drinking water and collecting wastewater. Measures to share out the financial burden more fairly could include progressive pricing structures, according to use, and free access to the first few vital cubic metres of water. But such measures are also the concrete expression of the right to water. Soon, all these proposals will be more than just lines in my book.

Food

Hunger and junk food

One in ten people worldwide suffers from hunger.[27] According to a UN report published in May 2023, the number of people suffering from acute food insecurity has tripled in six years.[28] More than 250 million people are in a state of food distress, or on the verge of starvation. Hunger kills one person in ten worldwide, and half of all children under the age of five. In Latin America and the Caribbean, more than one person in five does not have sufficient means to access a healthy diet. Hunger there increased by almost 70 per cent between 2014 and 2020. The world is hungry, even in the heart of the West.[29]

Yet, from farms to our plates, one-third of the food produced is lost or wasted. A better distribution of the food we have could eliminate hunger. In France, around thirty kilos of food are thrown away per person per year at home.[30] Seven kilos of that are still in the packaging! Some 32 per cent of food waste owes to the production phase alone (growing, rearing, harvesting). Some 21 per cent of it is lost during processing (in the agrifood industry). During distribution, 14 per cent of waste owes to shops, industries, supermarkets and so on. Finally, 33 per cent of wasted food is thrown away from our plates themselves: half in restaurants and half in the home.

But that is not all. Today, meeting our most basic needs, including eating food, can itself hurry people towards death. Junk food is the global disease of the century. Again, this phenomenon is closely linked to people's social situation. The food industry adds sugar to everything to get its consumers hooked. It is the same story with salt. Adults consume twice as much salt as the WHO recommends, and children four times as much. The food industry commonly uses 338 additives, used to colour food, preserve it or change its taste.[31] Sodium nitrite (E250) and potassium nitrate (E252), used for hams and salamis, have a carcinogenic effect. Every year, 1.5 million people die from diabetes. The number of people suffering from obesity and diabetes has doubled in twenty years.[32] The highest proportion is found in the areas hardest hit by poverty; in France, this means the Overseas Territories. There are twice as many cases of obesity and diabetes in the French West Indies as in the rest of the national territory. And, taken as a whole, there is four times more obesity among blue-collar workers than among top managers. You will have to forgive me for delving into the human profile of this graveyard. My intention is just to highlight the devastating effects of such recklessness.

The right to food

We have a fundamental, biological need to feed ourselves. But, from one end of the system to the other, the vagaries of commodity production and distribution impose absurd answers to this problem. Depriving people of food in wartime is a crime condemned by international law. We have been reminded of this recently, during the genocide against the Palestinians in Gaza. But what about ordinary life, in times of peace?

Food is a fundamental right. The brutal food system whose effects we are suffering today violates millions of people's right to food, even as this same system throws away millions of tonnes of produce. This violence has serious consequences for the physical and psychological health also of those who do receive food aid. Its effects are insidious, because this violence manifests itself through the repetition of small acts of shame, daily frustration and submission, faced with the control over their access to food.

Being fed properly is a right, enshrined in the Universal Declaration of Human Rights, much like being housed or cared for. There is a precise definition of this right. For the United Nations Committee on Economic, Social and Cultural Rights, the right to adequate food is fulfilled when every man, woman and child – alone or in community with others – has ongoing physical and economic access to adequate food or the means for its procurement. For, as we have seen, famine has more to do with poverty than with the capacity to produce food.

Different standards, different priorities

As we can see, when we think about ecological action as a question of mobilising for the rights of the human species, this brings together a wide range of demands. Some are already on people's minds, others not at all. What is important is the change of perspective. We are no longer talking about quality of life as a scale of performance. We are establishing fundamental biological rights, as we would for any endangered animal species. This allows us to see commonalities emerge between humans and

non-humans. But some fundamental rights concern our species alone – for example, the ability to reproduce. The new chemical age we have entered into, with its trail of endocrine disruptors, is now affecting fertility. In so-called ‘advanced’ countries, the average sperm count has halved in forty years.[33] The number of cases of testicular cancer is doubling every thirty years. In the same areas, both the number and the different forms of female infertility are multiplying. More women are suffering from endometriosis. Human reproduction is also becoming an ecological issue. This prompts us to think about other issues from a different perspective. For example, the right to housing is not a matter of comfort, but an individual need to live, and to live as a family. This right is recognised for animals, in the laws that apply to them. But ‘homelessness’ is spreading in human communities around the world. Above all, the proportion of homeless people in rich countries is increasing compared to the recent past, at every longitude and latitude, and even in the heart of the richest countries. There’s a real boom! Since 2016, overall homelessness, unsheltered homelessness and chronic homelessness in the United States have all increased every year. Over the course of 2023, nearly a million people experienced homelessness for the first time, the highest number ever recorded.[34] Questions of housing, health care, family and so many others are clearly matters of basic biological needs. They form the basis of just as many rights. Why should they count for less in the hierarchy of norms than the ones protecting private property?

Memento

The age we live in sets its own limits on capitalism. In an era of large numbers of urbanised and hyper-connected human beings, this system is unsustainable. For the sake of its own profits, it has created a new space–time that makes the harmony of human beings with nature simply

impossible. It is preventing us from reaching the level of knowledge about ourselves and our conditions of existence that is now essential. A revolutionary process is thus urgently necessary.

In France in 2017, Macron made his mark on the political right with a book promising a *Révolution.*[35] And he did carry one out: a neoliberal revolution. Both this country and humanity are thus crying out for another revolutionary process, headed in the opposite direction. In any case, any radical change in the political and economic order must be rooted in the conflicting social relations of our time. None of these changes can mean anything, outside the collective will explicitly expressed in democratic forms. Democratic persuasion and elections are the necessary form of political mobilisation capable of radically changing the course of events: not just by winning political power but by building and maintaining popular involvement. This is the condition for obtaining popular consent for the new order of things. But it is also – and especially – necessary in order to win buy-in from a society mobilised for this purpose.

In order to achieve the necessary break with the past, we need to better understand the world as it is now. We need to delve further into the world of the city and the people of our time, just as they are, in order to find the necessary forces for change.

II

The New Bases of Social Conflict, and Its New Protagonists

7

The City

The year 2008 marked a spectacular change. For the first time in human history, the population living in the world's cities outnumbered the inhabitants of the countryside.[1] For tens of thousands of years, the opposite had been true. But what had long been a minority way of life has now become hegemonic, across the planet. Yesterday's world, in which cities floated like islands in a rural ocean, has been replaced by one built on a boundless urban space. This reflects a major turn in humanity's long history. Yet it seems that we no longer even notice this happening. The city has absorbed us into itself, without any great fuss; we now take it for granted that this is, indeed, the environment in which we live. We may well consider the city just as neutral as any other landscape. But if we did, we would be missing something really crucial. The city is a mould that shapes our lives. It imposes a certain model on us – on all our activities, our ways of being, our desires and our needs. And also on our politics, if we again think back to this word's roots in ancient Greek. The term *polis* tells us that the city itself is the site of political discussion. So when we look at the struggles and conflicts of any given era, we should think about them mainly in this context. From its walls to its streets and its various trades, nothing in

the city has ever been neutral. This is even truer today, now that most of the world population are urbanites.

The city's various types of infrastructure give palpable form to the modern world of vast human numbers. They give us a sense of its way of organising itself, of its hierarchies, and of the social and ecological challenges that it faces. The city is, above all, the product of humans' decisions to organise and reorganise their communities, ever since they created the first such settlements back in the depths of time. Cities developed at a rhythm of their own, and in so doing produced markets, castes, written laws and even the personnel responsible for enforcing them. This also provided a fertile terrain on which the capitalist mode of production could later thrive (and this did, indeed, come much later). Each age in the history of the city has had its corresponding social relations of production, its own way of organising territory and its own forms of political action. In an age where everything is urban, this is also true of politics. And that changes everything. The modern city and capitalism already have a long and intertwined history. They have been bound together ever since commercial capitalism took its first steps in Europe, as the merchant cities of the late Middle Ages created international trade and banking. In that same period, cities developed functions that capital would later greatly expand in the interest of seeking profit. Trade, markets, the division of labour, accumulation – everything was ready for take-off.

Cities have always been home to the populations with the greatest social density – indeed, this is necessarily the case. In the contemporary era, the combination of large numbers and capitalism has in turn remodelled the urban environment. Marketised real estate has imposed its own logic on city dwellers and stripped them of control over the setting in which they live. This dispossession has also hurt human beings' connection with their natural environment. The modern urban context has thus become not only the site of political activity in general, but also – in part, at least – the

specific object of political action. Urban struggles in which residents fought to reclaim control over the city would soon overlap with the social struggle over the distribution of wealth. This fight would also give rise to new political forms. Various episodes over the centuries heralded this trend. Then, as ever bigger populations amassed in the cities, the form of political events increasingly fused with the setting in which they took place. The city thus became an all-encompassing reality, indeed one that became so taken for granted that it was no longer seen as a distinct historical subject. But it never stopped actively shaping our lives – and it would eventually nurture today's citizens' revolutions.

City, numbers, market, classes

An incredible discovery

But where and when did the first cities spring up? For a long time, archaeologists located the onset of urbanisation in the same places that they had identified as the cradle of agriculture: somewhere between Iraq, Syria and Turkey. On this reading, the first great cities were the likes of Uruk, Ur or Babylon. But, as so often turns out to be the case, the reality has more to it than that. Cities several centuries older than these were discovered in Ukraine. The life of these dense and populous human settlements, which had a highly organised form, stood outside any direct contact with agriculture. They date back some 6,200 years. Although Soviet archaeologists had discovered this already in the 1960s, it was not until the fall of the Berlin Wall that the rest of the scholarly community really took notice. But here we are talking about cities that had up to 15,000 inhabitants, and a population density similar to the outer suburbs of today's Paris.

A human creation

The most recent studies on these sites have reached important conclusions about these cities' origins.[2] They were, quite literally, created. We might easily imagine that these were villages that gradually grew into something bigger – and yet this is not what really happened. Rather, these cities were the product of premeditated planning. They were made up of standardised neighbourhoods, each consisting of around 150 houses grouped around a community building. Their outer limits seem to have been set in advance. In short, the city was the product of conscious human initiative. At some point, certain groups of people in ancient Ukraine decided to abandon their existing peasant village settlements in order to live in greater numbers further from the farms and fields. But why? There are no written sources to shed light on the intentions of these cities' founders. What we can tell is that they considered living in a larger community a more efficient way of organising things. The city is an 'emergent property' of the mass of numbers – that is, it becomes possible only because of their interaction. We will come back to this idea. The important thing, for now, is that, right from the start, the city appeared as a human creation – as a conscious project for a life that human beings would share. It also seems that these cities met their end through a likewise deliberate decision. After a few centuries they were abruptly abandoned. In Maidanetske, one of the largest cities in ancient Ukraine, the houses were burnt down all at once. This, too, was a political choice. The hypothesis preferred by archaeologists looking at both this site and several others around the world is that the city was destroyed because of a revolt. On this reading, one same social process was at work in all these different locations, and it had the same political consequences. It would seem that this meant the abandonment of the egalitarian structures from which cities had first emerged – a phase typified by the foundation of communal buildings. Indeed, equality has been a recurring demand

throughout the history of human communities. Right from the outset, the city has given rise to politics.

The city and accumulation

Living in the same place, and thus moving from a nomadic life to a sedentary one, prompted a first jump in the number of human beings. The invention decisive to making this happen was the capacity to store food.[3] Nomads had made much less use of this. In the cities, such storage played an immediate role in making societies more complex. It allowed for the accumulation of grain and foodstuffs and thus transformed these from ephemeral goods into durable ones. It then became possible to exchange them for other comparable goods. This was a decisive development. Food storage made it possible to plan for a surplus, in order to trade it at some point in the future. Cities managed and regulated the networks of exchange. Indeed, they were almost always founded on the banks of rivers, where ports were built, allowing for the circulation of goods. This also meant that part of the population could stop working in food production and instead specialise in other activities. They, too, would be able to eat, thanks to the exchange of the products of their labour. In this way, food storage produced large-scale exchange – and exchange produced the social division of labour. We find evidence of this in the remaining vestiges of the first cities. Some buildings were devoted to weaving, others to milling cereals, and so on. But that is not all. Food storage also led to the accumulation of surpluses, meaning that overall production exceeded the group's own needs. A surplus was produced not only so that it could be exchanged for various other necessary goods, but also to provide insurance against misfortune, bad weather, parasites and so on. When the group escaped these calamities, it ended up with more food than it needed. This surplus was immediately up for grabs, and there was always someone who found the means to lay their hands on it. So the city created social classes.

The city and power

Control over surpluses is a political issue. As soon as human production allows for accumulation, however modest in scale, the question arises of how it ought to be used. For whom? And for what? And is the answer the same every time? This immediately poses the question of political power. This power emerged in the city and through the city's activities. The caste that controls the surplus and organises its distribution first took form in the city. It then produced the specialist personnel dedicated to administering this surplus: clerks, scribes, notaries, tax collectors and so on. These were the first purely urban classes: political elites, merchants and administrators. The first monarchies, the first regular armies, taxation, the police, the justice system, prisons, the monopoly on monetary creation … all these attributes of political power were invented in the urban context and for its purposes. Cities often dominated the countryside, from which they raked in their income through taxes, unpaid labour, slavery and manpower for armies. But how could such authority be enforced? Violence would surely help, but it was hardly enough on its own. In the long term, it simply costs too much. So it is also necessary to create consent and legitimacy: a shared imaginary that offers a community its sense of cohesion. In these early cities, this meant a systematic appeal to the divine as the source of power, laws and hierarchies. The city was set under the aegis of the gods, whose heavenly order the men in power represented down on Earth. The city produced a collective political imaginary.[4] This was the narrative of reference that provided justification for its normative hierarchy: its laws.

The city and capitalism

Capitalism was born in the city

The cradle of modern capitalism lay in the city states of medieval Europe. These cities increasingly specialised in trade. Private merchants financed expeditions and transported goods from all the corners of the known world, and on that basis drew in huge profits. This allowed them to accumulate bigger fortunes, and faster, than was possible through the traditional methods of tribute, serfdom and slavery. They used their profits to buy more ships and to fit them out better: meaning, they invested. In this same period, new banking instruments were devised in order to help finance these expensive expeditions. These were the earliest forms of financial capitalism. In fact, industrial capitalism was also beginning to take shape in the cities of the United Provinces and northern Italy, in the textile workshops of the twelfth to eighteenth centuries. But all this was still embryonic, and it was slow to evolve. It took the power of colonial conquest – the trade in slaves and in sugar, truly the 'petrol' of the eighteenth century – to finally bring about the great take-off of capitalism in the nineteenth century. Over the last 200 years, capitalism has changed in scale, as has the city along with it. Financial capitalism played a leading role in this development. It was the driving force of the urban revolution, its master and its main beneficiary. The city provided for the construction, reconstruction and constant reconfiguration of this system – all decisive tools for extending its reach, and most importantly for overcoming its crises.

The crises of capitalism and urban development

The entire history of capitalism, and of its various evolutions and transformations, may be seen as the history of its successful attempts to overcome its inevitable crises. Urbanisation has played a central role in this history. Launching major urban development projects is, first and foremost, a means of recycling capital. What could be more profitable than building a city? It means transforming a bare space of no commercial interest into a

source of reliable income. Even a small initial investment, such as buying a plot of land, offers a huge opportunity for profits if an office block is built on top of it. The city provides a useful location; capitalism turns it into a source of rent. ‘A lot of people want to be there, so I sell at a high price.’ It is pure, unadulterated enrichment, and just the kind of easy, effortless accumulation that capitalism needs. The city is a dense mass of human beings – and for capitalism, it also means a dense space of profits. To give us a sense of how this mechanism works, geographer David Harvey draws on the example of Baron Haussmann.[5] The urban redevelopment of Paris under the Second Empire involved major demolition works, as newly built boulevards, avenues and wide streets cut through neighbourhoods previously made up of ill-reputed alleyways. These parts of the French capital had, up to this point, been inextricable jumbles of informal dwellings where even property rights were hard to untangle. Baron Haussmann transformed them. In their place, he designed beautiful thoroughfares around which standardised, bourgeois blocks could be erected: the famous Haussmann buildings. This was also quite a jackpot for the capitalist class, the financial partner of the baron’s enterprise. The urban space was built in a manner that conformed to the canons of the market: it was delimited by property titles and standardised, and it responded to solvent demand. The decision to begin the great Haussmann works in Paris had come in the early 1850s, when French capitalism was still reeling from the great financial crash of 1847. Haussmann’s project allowed it to develop its banking and credit system. These major redevelopment works in Paris provided an early model for how a mass of capital could be mobilised to reshape a city. This operation also involved the first forced population transfers, pushing people out of the city centre and away from its amenities. This gave rise to a hierarchical social ordering of space, which was destined to become a focus of identification and of struggle – a mould which today structures the whole of society.

The city and consumerism

As capitalism has time and again rebuilt the city, it has also spurred the invention of new desires, new ways of life and new consumption patterns. This ultimately means new markets and thus new outlets for capital. In Haussmann's case, this meant the invention of Paris's first *grands magasins,* or department stores. These were not just bigger shops, but a way of offering the bourgeoisie of the day a desirable lifestyle built on consumption. In another later wave of urban renewal and expansion, in the aftermath of the Second World War, capitalism invented the consumer society, with its great shopping centres or malls. Looking at more recent times, we could cite the transformation of pedestrianised town centres in the major cities – all bearing the names of the same retailers – and the huge Amazon hubs sprouting up in the peri-urban landscape. In short, capitalism has made the city into its own playground. It is constantly using the city to recycle its capital in real estate operations as well as to mould new spaces of consumer society. The city has thus become the basic structure of social relations in the broadest sense, taking all aspects of human life under its wing.

Numbers, eras of capitalism and the ages of the city

Since the first wave of industrialisation, the history of the city has been welded together with the history of capital. This is a history of expansion, ever conforming to the logic of capital. But we also ought to connect this to the most crucial factor in societies' history: their rising numbers. Exploding population numbers go hand in hand with the development of capitalist urban civilisation. In fact, since the start of the nineteenth century, the world population has doubled three times over: this happened from 1820 to 1930, from 1930 to 1975 and again from 1975 to 2022. Each of these doublings goes together with a major fork in the road of human history. In each case,

the rising numbers and capitalist growth have been correlated with a particular model of urbanisation. Each time capitalism has headed into crisis it has had to remobilise on a new basis, and this has in turn led to new urban models which will allow for another phase of growth. This is no linear onward march. The city imparts this rhythm like the heart does to the body. From this follows the form of the urban human masses, and the rhythms of their social and political activity.

The age of the industrial city

In 1820, the world's most populous city was Beijing, with over a million inhabitants. Next came London, with 800,000 people, then Paris with 550,000. Europe was still emerging from a long period of wars, which had been driven by opposition to France's republican revolution. It was in this post-war context that capitalist industrialisation could develop in full force. This was also the first period in which cities fully came under the grip of capitalism. Factories were set up in the heart of the large cities, and new cities were built around the factories. The ground was broken for major urban development projects in most cities, based on France's Haussmann model. These projects opened the way for the monetisation of space, through the building of lavish apartment blocks or the creation of spaces dedicated to bourgeois consumption. A new spatial pattern was taking form, and it was also shaped by new means of transport. The first steam railway opened in the United Kingdom in 1825. But there were also changes in cities' own internal organisation, in the golden age of trams and metros. The world's first underground line went into service in Lyon in 1862; London followed suit in 1863; and then New York in 1870 and Paris in 1900. The telegraph slashed the costs of communication. This age of urban development mainly concerned Western Europe and the East Coast of North America; it was based on the colonial subjugation of much of the rest of the world. But in the first half of the twentieth century, capitalism soon headed

into crisis under the weight of its own contradictions. The First World War was a sign of this, but it was the Great Depression, starting in 1929, that really brought capitalism to its knees. By the end of this period, in 1930, the big cities had not only changed shape but also reached a whole different scale. Greater London had 8 million inhabitants, New York 7 million, and Paris and its environs 5 million. By this point, Beijing lagged far behind. The global population had grown from 1 to 2 billion. The world's centre of gravity was in the cities of Europe.

The age of the planned city

Only at the cost of a second global slaughter would European capitalism be able to overcome the great crisis of the 1930s. Within a few years of the end of the Second World War, one-third of humanity was outside the capitalist system. Only through compromise would capitalism be able to keep up its frantic pace. But the compromise which it found was a win–win situation for capitalism: mass consumption. The seeds of this new growth model were sown in the interwar United States with Henry Ford's industrial policy and Roosevelt's New Deal. Capitalists accepted a certain measure of management of the economy by the state. This new era also had its counterpart in the urban space: but this time, the 'Haussmann' was from New York, and his name was Robert Moses. Heading several urban planning agencies in New York State from the 1930s onwards, he built urban highways and bridges designed for automobile traffic. He changed the face of the city. As a result of Moses's vision and his approach to planning, urban highways, great housing estates and dormitory suburbs sprang up everywhere. The car – the connecting factor in the new urban landscape – became one of the first mass consumer goods, and motor vehicle production became one of the world's most thriving industries. In France, the Paris region *préfet* Paul Delouvrier spearheaded this transformation. The dominant new urban forms were standardised, with the

many rows of identical detached houses, big housing estates, blocks and towers and so on. This was not just a way of organising space. Rather, it was a means of control over carefully organised, distributed and classified populations – and one in which each of society's functions was allotted its own dedicated space. The city exuded a certain social order and a certain way of imagining the world. The urban revolution of this era took the form of planning urban sprawl. It was driven by the motorway, the emblematic form of the transport network, and by the telephone in the realm of communications. It affected not only North America (this time spreading from East to West) but also parts of South America and East Asia. Between 1930 and 1975, the world population grew from 2 billion to 4 billion. The geopolitical centre of the world had left Europe behind – and moved to the other side of the Atlantic.

The age of the neoliberal city

In the 1970s, capitalism again headed into a serious growth crisis. Mass consumption in the form of standardised products was reaching its limits. The drive for equality coming from the decolonisation process was followed by a drive for equality in the countries remoulded by postwar urbanisation. This period is still most emblematically represented by the images of May 1968 in France and Mexico, the civil rights and anti-war movements in the United States, and the democratic socialist experiments in Chile and Czechoslovakia. In this context, capitalism had to reinvent itself. Its way of achieving this: to abandon the strategy of social compromise. It instead banked on squeezing wages, relocating industries abroad and privatising the welfare state. The state's role was changing: it was no longer a guide and planner, but a mere guarantor of financialisation and market liberalisation. Cities went along with these changes too – but this time around, the urban growth would not be planned. Megacities spontaneously produced rising inequalities. There was a kind of secession as wealthy

neighbourhoods cut themselves off from the rest. But this period also saw a return of homelessness in the global North, and the rise of tentacular shantytowns in the global South. There was an extreme marketisation and fragmentation of urban space. Commercial advertising took up a new place in the urban landscape, such as had never been achieved by any propaganda machine in all human history. In this new global urban archipelago, the major cities started to turn into airport hubs. Digital networks drove a boom in communications. The logistics network also took off like never before, in response to the now vast distances between the centres of consumption and of production. Urbanisation reorganised the entire global South. By 2021, the world's largest cities were Tokyo, with 41 million inhabitants, followed by Jakarta with 35 million and Manila with 29 million. By this date, the biggest US city appeared twelfth on the list, and the biggest European city just twenty-ninth. Today, there are 8 billion people on planet Earth. Its geopolitical centre of gravity has shifted to the other side of the Pacific, to Asia.

At each stage, the city has been both the vehicle and the material form in which the mass of human numbers has changed the social order. The urban environment has kept pace with the transformations of capitalism and the resulting geopolitical shifts. The city has patterned the material fabric of human life and moulded our world's conflicts. The modern human is truly a *homo urbanus.*

A new and unequal urban reality

The segregated city

The new urbanites thus live in cities which have been repeatedly reshaped by capitalism – and their experience little resembles that of the city dwellers

of previous eras. Certainly, we should avoid daydreaming about some golden past, as if imagining that the city and democracy always went together. But, more than ever before, life in the city today is taking on the form of a dispossession. Most people's experience of the city is determined by highly unequal mechanisms which stand entirely beyond their control. This is true even in terms of the distribution of the city's inhabitants. The city is not built to make life easier for all. It is not designed to satisfy needs in an efficient way, and nor is it optimised to save resources. The modern city is, above all, typified by its segregation. Social classes are divided into neighbourhoods on the basis of wealth. The rich do not want to live next door to the poor. Their neighbourhoods are the most socially uniform and the most closed in on themselves: if some communities get called 'communalist', then this is, above all, true of the rich. The poor are relegated to the outskirts of the more privileged urban spaces. This is because capitalism's fundamental logic is to sort and prioritise, creating scarcity out of anything and everything – including urban space. The rise of the neoliberal era has been rocket fuel for this way of organising cities. Here, as in other areas, a laissez-faire approach has relied on deregulated market mechanisms to solve all social problems. In this way, the 'invisible hand' of the market – albeit often helped along by state intervention – has produced a city that is highly profitable for just a few. Of course, we could point to different methods that have been used, depending on the country, the continent and the passing of decades. But in each case, the first step is to create a market. In each case, the first effect is a social specialisation of neighbourhoods. This makes it possible to charge people a high cost to move out of the most run-down areas. Still, these areas would not be 'run-down' if it were not for the whole process of capitalist urbanisation. The urban riots that we are now seeing around the world all start from this segregation. They have long-term consequences, shaping the world views of both the populations in revolt and the others who watch these uprisings

take place. They leave scars that can disfigure a society and deepen its fragmentation.

Creating a property market

One first case study in this regard is the kind of anarchic urban sprawl which we see in today's France. This is the product of a reversal of French urbanism policy in the late 1970s. After the Second World War, new housebuilding had been based on extensive state planning. In that period, the public authorities decided which areas would be devoted to new neighbourhoods or even new towns. Évry, Sénart, Cergy-Pontoise (each near Paris), Villeneuve-d'Ascq (in the Nord *département*) and Hérouville-Saint-Clair (in Normandy) were all the result of this centralised planning. There are also many so-called *grands ensembles*, or large housing projects, in towns and cities across the country. The state was also responsible for financing these new builds and setting their rental prices. This was the heyday of the French low-cost housing model. This context created more homogeneous social behaviours, and spurred demand related to the shared living space. Households were less indebted, and this, too, made them freer to join in collective action. This housing situation, which was also linked to employment status, produced its own model of social consciousness. But in 1977, Prime Minister Raymond Barre launched an about-turn in housing policy. The state dropped its focus on house building. From now on, it took a laissez-faire approach: let the market do its work. In this same moment, the government introduced subsidies for first-time buyers. From this point on, urban expansion was no longer planned or coordinated. The social disorganisation of the urban space fired the starting gun for a general commodification of all social relations.[6]

Urban sprawl

Immediately, a process of urban sprawl got underway. Developers built neighbourhoods of standardised, poor-quality detached housing on cheap land in peripheral areas surrounding the urban centres. They sold these properties by promising buyers the mirage of returning to ‘the countryside’. The deeper into the outskirts they moved, the cheaper the prices were. The property market created a social hierarchy based on distance from the centre. Those who moved into these houses, far away from everything, became totally dependent on their cars. They took several decades’ worth of credit on their shoulders, and these homes’ poor design also meant a struggle to pay the bills, for instance given the difficulty of heating these properties. Still, this urbanisation was also a fabulous opportunity for finance, the new master of the city, to extend its reach, as it showered everyone with mortgages of varying degrees of security. These loans granted to poor families would, through many bubbles of credit, become the fuel of the financial sphere itself, as revealed by the 2008 sub-prime crisis in the United States. Here, we are talking about a way of managing territory based on concentrated access to urban networks, and the various discriminatory practices that this entails. This logic accelerates the remoulding of the urban form to suit the norms of contemporary capitalism. And the rise of metropolises gives administrative form to this new kind of social organisation, based on a boundless urban space. Living so far from everything, these residents are enslaved by their dependence on constant transport and find that they are severely constrained by this new urbanised space. They make up a social category unto itself, conscious of its own existence. In 2018 it was they who drove the Gilets Jaunes movement (the ‘Yellow Vests’, so named after their distinctive uniform), which seriously challenged the stability of the political powers that be.

Gentrification and plutocratisation

All these policies systematically have the same effect: that of excluding people from certain neighbourhoods and of heightening urban inequalities for the sake of creating financial profits. In the major city centres, housing itself is becoming a financial product – just another asset with which to diversify your portfolio. This is driving a steep rise in property prices in these same districts. In the 1970s, sociologists coined the term ‘gentrification’ to describe how the working-class residents of certain inner-city areas were being replaced by petty-bourgeois arrivals from the upper middle classes. But this word is outmoded for describing today’s situation in Paris, London or New York. In the British capital, house prices have multiplied fivefold in the last quarter century. In New York, recent years have seen the rise of an ‘ultra-luxury’ apartment market. This is today the most dynamic housing market in the city, handling transactions worth tens or even hundreds of millions of dollars. As for Paris, there blue- and white-collar workers amount to no more than 4 per cent of homebuyers, even though they make up half the population. The more central districts of the French capital are no longer inaccessible only to the working classes, but also to the entire middle class. Gentrification has itself been replaced, by a ‘plutocratisation’ of the major cities.[7] Even for the upper middle classes, staying put has become a hellish ordeal which often means having to sacrifice half their salaries. They are surrounded by a few pockets of poverty that manage to scrape by. These are the most neglected neighbourhoods, insofar as there is no profit to be had from them; for financial capitalism, they are useless. The victims of this urbanisation process – who are in the majority – often face insurmountable difficulties in satisfying their basic needs. The market’s losers are either left stuck in their own separate spaces or end up being forcibly evicted from them. In this context, the contemporary city harbours a mighty explosive potential. Like any shared social situation, social discrimination in the urban setting produces a common political consciousness. It generates a combination of

protests and, in opposition to this reality, world views which obey a quite different logic. Urban political consciousness is an advanced form of political consciousness.

The separation between humans and nature

The city is not just a social reality but also an ecological one. Great megacities are springing up all over the world, especially in the global South. They are taking over natural environments. Transforming unprofitable spaces into profitable ones is, indeed, the very essence of capitalist urbanisation. And the unprofitable space par excellence is wilderness: the forest, the wetland, the bare coastline. This is how ‘land take’ works – this being another name for the destruction of ecosystems on the altar of our cities’ voracious appetites. Urbanisation under capitalist command is an unbalancing of the relationship between humans and all other natural life. It creates a distance, a split, between the human and non-human worlds. We have said that exchange-value, the division of labour and sprawling value chains all take root within the urban space. They separate human need from the means of its fulfilment – and divide human beings themselves from the greater whole to which they belong.

Pandemics and urbanisation

But this separation can only ever be artificial. Human beings cannot somehow escape their condition of being part of an ecosystem. So this relationship instead develops pathologically. Pandemics provide one spectacular insight into how unbalanced it has become. The irony is that urban sprawl has brought us close at hand with species who were not previously used to such contact. More than 85 per cent of tropical wetlands have been eliminated since the beginning of the industrial era. One hundred million hectares of tropical forest have been felled since 1980. The

destruction of natural habitats drives species to migrate. They come into contact with humans – as do their viruses. There is a well-established link between the deforestation of parts of Africa and the outbreaks of Ebola. COVID-19 likely followed the same path, via bats or pangolins. In the case of avian and swine flu, it is factory farms and their extreme overcrowding of animals that act as incubators. But the political authorities remain indifferent. In France – absurdly – after five outbreaks of avian flu, killing tens of millions of poultry, the risk of zoonosis is still casually overlooked.

Urban revolutions

The right to the city

The new urban reality is ridden with conflicts – and produces its own kinds of struggle. They revolve around various distinct issues: the right to housing, access to city centres, less rich neighbourhoods' right to existence and access to the networks on which our collective life relies. These demands are often linked to a democratic demand, so that the people can have its say in deciding the future shape of the city. So it is no great shock that, during citizens' revolutions, the issue of housing and the right to the city often appear as a more or less explicit demand. Urbanisation is an all-encompassing reality, which today involves all aspects of individual and collective life. The call for a different world is a call for a different kind of city. The French philosopher Henri Lefebvre was already thinking along these lines in the 1970s.[8] This insight is more relevant than ever to modern citizens' revolutions. We can say that the fight for the right to housing is the most powerful spur to social mobilisation in this field. Both capitalist logics and mass climate migration are driving up the number of unhoused or informally housed people. This points to a kind of pressure which is likely

to rise in future, but which, for the moment, remains within limits. Still, some recent mobilisations around this theme give some idea of the forms which it might take. In Brazil in 1997, a Homeless Workers' Movement was founded in São Paulo, modelled on that country's Landless Workers' Movement. A quarter of the housing stock in the city centre lies vacant. Hundreds of thousands of people live in shanty towns, unable to pay rent because they have no stable source of income. The movement has grown and spread to other large and likewise unequal cities in Brazil. Its main means of action is to occupy empty buildings, in order to house people without a roof over their heads. There are many such examples around the world, from renters in the Bronx in New York to the activists of the anti-eviction platform (PAH) in Barcelona and the struggles in Cairo's informal settlements known as the *ashwa'iyat.* The important thing is to understand just how crucial these struggles really are. In a world dominated by capitalist urbanisation, housing is not a side note but an essential element of popular struggles. To call for the right to housing is to demand a different way of organising the city and thus society itself. This also tells us that urban conflicts have an anti-capitalist dimension – and that they open up possible forks in the road in the history of our urban civilisation.

The right to nature

May 2013. Environmental activists and locals from the Taksim district camped out in Istanbul's Gezi Park. They were there to resist the construction machinery that had been sent to tear down the park's trees. Starting the next day, thousands and then tens of thousands of Turks converged on Gezi Park and Taksim Square to join in the protest. Demonstrations and assemblies would be held in every major city in Turkey. In the end, the Gezi Park camp prompted the largest popular mobilisation of the Erdogan era. The massive energy behind the Istanbul movement in defence of the park forced onto the agenda the demand for

nature’s place in the city. For this social movement had indeed taken on a revolutionary character. Its starting point was surely surprising: the fight to prevent a green space being replaced by a shopping centre. Here, in the most classic fashion, urban demands had grown over into a broad movement – and done so in the face of a harsh authoritarian regime. So this type of battle is neither a secondary issue nor some quaint curiosity, but a driving force in urban popular struggles. Indeed, we can see them spreading all over the world. They may have to do with the removal of a park, or a brownfield site, or an urban vegetable patch. The various gardens created in France – the one at the Saint-Sauveur wasteland in Lille, or Montreuil’s walls lined with peach trees – are models of citizen organisation, and of the collective, political occupation of urban space. But there are also other examples of these models in action: when people ‘green’ public spaces to reduce heat island effects and the stifling temperatures which we now routinely suffer, or when they create community gardens or types of agriculture modelled on the worker allotments of the last century. In other words, urbanites are insisting on having their say in the creation of new urban forms which move away from the current gulf between human beings and the natural ecosystem. This concern points to a growing awareness that humans live in a symbiotic relationship with other life on Earth. At the same time, this direct experience and strong local-level engagement also offer a way of building the new and harmonious relationship that is so crucial to our species’ survival.

A collectivist urban consciousness

Urban capitalist civilisation has a tendency to be all-encompassing. It engulfs everything, extends everywhere and casts all experiences in its own mould. It has erased the separation between town and country, as well as the bonds between human beings and their ecosystem. We have said that the city represents humanity’s creation of its own space – the conscious

production of the social biotope through which humanity moulds and remoulds its own existence. But urban capitalist civilisation has turned the city into a machine whose workings are beyond most people's reach. Urban forms shape the lives of those who live in them and yet seem completely independent of these inhabitants' own choices. This produces a feeling that we have lost control; we get the sense of an unstoppable wave that is sweeping us all along in its wake. But how can the city – which is, after all, nothing but the conditions of our common life – so totally escape our control? This is why revolutionary upheavals seeking global, collective change are often built on urban demands. These struggles forge a collectivist consciousness. Indeed, this is another effect of the extension of the urban way of life to all: no one can change their own conditions without also impacting everyone else's. The home where I live; the transport I use; the food I eat; my relations with my family, friends and nature – all these aspects of life are determined by a particular urban way of being. Any attempt to transform this way of being has to be a collective endeavour. So, as an urbanite, I have only one way to regain control of my life: to become a citizen.

8

Networks

Our networked life

The nerves of the city

The adult human body is thought to contain up to a hundred trillion cells. Among other things, these cells make up eighty different organs. Our existence depends on their coordination via far-reaching networks. One of these is our body's network of blood vessels. Laid out end to end, they would total 100,000 kilometres in length. Without this network, we could not survive. The wiring of the nerves is even more extensive, at some 190,000 kilometres long. They are the link between all our perceptions and our movements. This also reminds us of an enduring law of the living world: the vaster and more differentiated an organism is, the more its survival depends on complex and extensive networks.

I think that this reference to the human body offers an evocative enough comparison to help everyone to get to grips with the subject at hand. Urban collective networks construct the social relations of human life in our time. They establish an inescapable social relationship, and it is the very foundation of an everyday conflict between 'them and us', of the opposition

between people and oligarchy. For everything makes up a whole: the mass of human numbers together with the city, the networks on which we rely, and contemporary capitalism.

Along with the rise in population numbers, there is likewise an increase in the number of relations on which each of our lives in human society relies. Individuals become ever more dependent on the conditions which make these relations possible. So when we think about the cities where populations are today concentrated, we need to look at something more than the space occupied, the buildings and the urban space's most immediately visible material aspects. More importantly, we need to look at the conditions that the city creates for each person's existence, and the social relations that are established as a result. To allow for their existence, urbanisation necessarily produces collective networks. The formation of these networks is, in a sense, an emergent property of urbanised life. This is not a situation that any of us chooses, but one that is imposed upon us. It is the essential fact of our time: for access to these networks is the basic condition of life. Each of us depends on them for everything. And each such network always depends on a material infrastructure that is controlled by its owners. This infrastructure will direct the flows of these networks, feed them with energy and so on. Hence, none of this can be divorced from the social relations of production of which these collective networks are also part. These networks thus become the focus of conflict between their owners and those who depend on them for their life and its reproduction.

Networks, everywhere and for everyone

Today, everything we need for our lives depends on the supplies that these networks offer. For instance, we might well ask what our everyday lives would be like without electricity. All sorts of things on which we rely would be put out of action: lighting, heating, lifts, traffic lights, transport, machinery, domestic appliances and so on. The sheer length of a network is

also an indicator of how important it is and how many people rely on it. The electrical grid in France is over a million kilometres long, not counting the wiring inside our homes. And what about drinking water, without which human life is impossible? Its network consists of all the piping through which water flows, from the point at which we access it through our kitchen or bathroom taps to the discharge and treatment of wastewater in a separate loop. France's drinking-water network is over 900,000 kilometres long: twenty-five times the way around the Earth. The same rule applies in all aspects of life. To get to such and such an address we go down some road, then a street or an alley. The motorway and road network covering mainland France is over a million kilometres long. We could mention countless other such examples. So far we have mentioned only physical networks – but what about the Internet? Access to thousands of everyday applications depends on it. The cables that carry its data criss-cross the world. Put end to end, they would cover almost 1.5 million kilometres: more than thirty times the way around the Earth. The Internet has become *the* essential network, the one that increasingly integrates the others. So the networking of all human activity is a constantly developing phenomenon, and it is becoming ever more central to society in general.

The extension of the network domain

For anyone in a city, whatever problem they might face, the only solution is to connect to some sort of network. This is also true in what may seem like less obvious cases. For instance, we might not instantly think of including education in this category. Yet the means of accessing the knowledge essential for life in today's complex societies surely do rely on a network – an educational path that brings together all sorts of players from the nursery school right up to the university. Its internal organisation is another example of a network. So, too, is public health care. Most simply, because it requires the routing and the coordination of various different flows: the channelling

of health care workers, equipment, drugs and so on. But with the advent of digital procedures, new networks are emerging that are even denser and more impossible to do without. They even allow for the controlled injection of medicines and other health care products at the appropriate moment.

The world of networks is now entering a new phase. The most varied economic sectors are now being invaded by ‘connected’ objects, in the so-called Internet of Things. This expression was coined in 1999 to describe this new extension of the network domain. This was supposed to herald the near-imminent arrival of the generalised connectivity of everything – a connectivity which would also be open to all. By now we are all familiar with this kind of seemingly libertarian promise, though in general its only concrete result is to make social control a more personalised affair. More importantly, these connected objects transform everything they touch into new networks. Of course, for some time already networks have been communicating to collect all kinds of real-time data. This is the case wherever it is possible to amass the information gathered by sensors into databases. This ranges from monitoring the physical state of some installation (for advance warning on whether repairs are needed) to counting the actual number of visitors to some venue (for the sake of setting entry fees). But, above all, the new generations of connected objects are forming networks which could allow online objects to communicate with each other and thereby synchronise their operations. Moreover, such networks are now crucially important in enabling their owners to collect and analyse data for other uses. There are billions of objects connected to such networks already. Today, the most important desired value is the permanent collection of information about everything – and everyone. Of course, here the aim is to gain detailed knowledge of individual behaviour, such as will in turn allow for all manner of commercial offers. But this also creates another kind of dependency for tomorrow’s users. The race is on to make connected objects interoperable in a simple and standardised way.

Platforms are popping up with this aim in mind. The world of networks is thus an ever-expanding universe – and without a major change of conditions, it seems destined to extend to all aspects of human activities. For the individual, this means being increasingly annexed to these networks' own requirements, as they find themselves ever more dispossessed.

Networks and behaviour

We have said that all our needs, however personal or public, will be met through access to networks of various kinds. But, if that is true, then these networks can hardly be considered as just so many service-providing tools. In truth, networks themselves shape and specify our needs, just as the shovel creates a shovelful. They provide services under given conditions, and these conditions are inseparable from the services actually provided. This means that networks inject socially valued standards of taste and action into our custom and practice. Standardised goods are then imposed on everyone, through a well-known effect of mimetic desire. Even when the algorithm of a network like Amazon suggests products to us, none of them are really created just for the individual prospective buyer. The 'personalised' offer is designed beforehand, based on categories created by collecting and aggregating data from millions of people. There is then an immediate feedback effect. In turn, the services on offer establish norms of individual conduct. They standardise consumer behaviour. How-to guides become not simply a way of making things easier for us, but a means of training us. The sociology of everyday life shows just how much our way of using them is impacted by how others see us. In this context, our individual behaviours can be seen as a way of being, which is directly shaped by the preset ways of doing things. The result: we ultimately express our needs in the same forms and conditions which networks themselves suggest. This is how they produce a common culture; it arises not from our demands but

simply from the network's own operational requirements. This common culture involves a set of ways of behaving, a specific vocabulary and a training of the individual. We are familiar with them, and we submit to them. All this is deeply ingrained in contemporary social relationships. The world of networks also gives rise to a cultural universe – or, to put that in other words, to a way of imagining reality. Within this universe, everything is supposed to be quantifiable, transportable, subject to evaluation and, of course, constantly available. Everything is under the rule of the networks and the flows that they organise. So it often seems that the essential question is how to best optimise these flows by making the networks run faster. This logic also structures individuals' lives. These networks form the daily fabric of our existence, patterning our deepest-rooted habits and routines. Everyone becomes part of a flow and has to conform to its rules. We see this when we spontaneously divide ourselves up into queues as we enter into some network, or when we obey the signals and instructions which we are given through all sorts of displays.[1] Of course, a way of *doing* can often become a way of *being.* So we can say that the central role that networks play in contemporary society is an all-encompassing sociological and cultural fact. Networks weave the threads of our voluntary servitude to an order of things that is all around us.

Networks and social order

Under these conditions, networks, their functioning and the services which they provide obviously do pattern our social relations. They carry with them the relationships of domination and discrimination of which we are ourselves a part. We can capture this by drawing on the rudimentary example of the 'access authorisation' given by the owner of some network. Is it open or closed? Nothing is available without this initial information. Neither the water from your tap, nor the light when you flick the switch, nor the Wi-Fi at home. And so on. It all depends on a supply contract in good

standing. In each case, we are talking about a highly codified social relationship protected by laws and regulations. This is why we again need to look beyond the physical aspects of how networks operate. For we also need to understand how, in each instance, a network also produces a social relation. This is, of course, a relationship of dependence. But it is also wholly conditioned by the dominant social relationships of the day. Networks produce and maintain a social order. Republican theory tells us that if our needs are alike, then we also have equal rights to satisfy these needs. But do we really have equal access to the networks that allow that to happen? Everything hangs on this point in the human condition. Do we have guaranteed access to the means of survival which the networks provide? For what price? Is their performance guaranteed? Is it a monopoly or are there competing providers? Do we not each become either the user or the ‘customer’ of a (sometimes identical) service, depending on whether it is publicly or privately operated?

Between the tap and my thirst

Networks thus decisively shape our social life and that of society as a whole. Ultimately, our awareness of this is a bit like our awareness of the need to breathe: we notice it when something gets in the way. Networks form a sort of directly social relationship with us. When I am thirsty and head towards the tap, there is no intermediary whom I must first either negotiate with or overpower. My understanding that the water network has a broad social character is overshadowed by my immediate urge to quench my thirst. Instinctively, we all know that access to networked services is the first necessary means to have control over our own lives. This control is the primary thing which we aspire to in any given moment; indeed, it is often key to our sense of personal dignity. The open or closed network is all that stands between the ‘me’ who decides and the ‘not-me’ on which I rely to fulfil my pressing decision. We know that if this access is denied, we will

not be able to produce and reproduce our material existence. Everything that places conditions on this access thus necessarily becomes an issue for each of us. We are often aware that this is the case, but without understanding quite how important a political reality it represents. It is a relationship different to other situations of domination or discrimination. At the moment of thirst, the tap is the master of the world. No negotiation is possible.

The network form

Taken as a whole, the list of functions performed by networks is just as long as the list of human needs that need meeting. This is worth being aware of, for this dependence is crucial from every point of view. Indeed, it establishes just as many individual social relations and collective modes of organisation. In the end, what would be left of any of us, if we were removed from the various networks into which we are integrated? Nothing, or almost nothing. Doubtless this can be more or less easily admitted, but there is no alternative to the world of networks. No one can do without their services. In this sense, they establish the global reality, the world as it is for everyone. They determine its nature, how it works and most of its imperatives. The ‘network form’ integrates each individual within a hierarchical system, depending on the access that is granted them by their contracts with service providers.

Once we have recognised this much, we can readily identify the characteristics that all networks have in common, whatever their specific function. The ‘network form’ can be summed up in simple terms: it is the set of infrastructures through which the circulation and distribution of material and immaterial necessities are organised. In each case, they are defined by three components: some material container, the information that commands action and their physical circulation.[2] This basic trinity is now apparent across the various fields of human activity.

Abundance and scarcity

A network is more obviously important when it is missing for some reason. Yes, networked life has its downside, in the absence of some network which we need. When we have to pay the bill for some service, the possibility of losing access to it is surely a powerful threat.

The extension of networks structures the geography of urban space. It does so within a frame set by the dominant social criteria and the discriminating factors of the day. Anyone can see this for themselves. If you look at the classified ads for apartments or houses, you will sometimes read the words ‘close to all amenities’. Generally, this line implies higher prices, while the lack of it means cheaper rents. But what are these ‘amenities’ that are driving up property prices? A train station, just a few minutes’ walk away, or a bus stop. Local shops or a supermarket nearby. Quality schools, or a good range of medical services and cultural venues. In short, these ‘amenities’ in the world of property ads are points of access to networks. Proximity or desertedness are the two sides of an urban model that unites both abundance and scarcity. Indeed, without this duo, no market is possible. In these conditions, when you pay for an expensive home in the city centre you are in fact paying for an access right. There is no justification for this – except, of course, the threat of having to live somewhere else, in an urban desert devoid of services. Those who cannot afford it end up on the outskirts, ‘far from everything’. To get to school, to the hospital, to go shopping and so on, they can only depend on a single means of transport. It is a way of getting around which they provide through their own personal means: the car.

The new deserts

Private networks naturally tend to desert those locations without a sufficiently large customer base with enough disposable income. Yet this

will often undermine access to basic necessities. We all know about medical deserts marked by inadequate health care provision. But this trend affects all sectors, including even the ones most crucial for everyday life. Food is a striking example of this. In the United States, ‘food deserts’ are today a well-known problem of urban geography. These are areas whose residents do not have access to a groceries outlet where they can find sufficiently varied produce, especially fruit and vegetables. According to the Department of Agriculture, these ‘deserts’ cover almost 10 million square kilometres and affect 39 million people in the United States. But this situation – and, indeed, the expression ‘food desert’ – is also reaching European shores. It mainly affects the poorest neighbourhoods. In the past, the market’s tendency to geographically concentrate everything for the sake of profit maximisation was supposed to be offset by the intervention of public services. Their activities were meant to be evenly distributed across the country. But the neoliberals tore up this policy. They subjected public services to competition – in other words, they erased their egalitarian content, including the principles of redistribution and levelling up. They embraced and intensified the concentration of all services in a few urban mega-centres. This was an institutional model for the abandonment of medium-sized and small towns, relegated to the status of peripheries confined to the margins. Hence, the geography of deserted areas in a networked world is a social geography. Here we find characteristics that are largely shared by both small towns and the working-class neighbourhoods of major urban centres. For example, the most barren medical desert in France is the *département* of Seine-Saint-Denis, 93 per cent of whose territory is under-serviced by doctors. We could talk about similar situations in Aisne, Eure-et-Loir and Indre. Here we see that the urban social condition does in fact materially unite the places that reactionary rhetoric constantly sets against each other: working-class neighbourhoods and peri-urban or rural areas. The new geography splits into the map of places where

networks do reach, and that of the deserts where they are absent. It is no longer structured by rivers and hills and fords and mountain passes; rather, this geographical reality is eminently social.

'Far away from everything'

The market and social reordering of France's territory has been a methodically organised process. For two decades, public services have been picked off one day after another. One post office and one school have been shuttered every day for the last fifteen years. One-third of all maternity units have closed in twenty years. One-third of small-town railway stations are no longer served. I could go on. People find that they are 'far away from everything'. Obviously, this expression speaks to a *physical* reality. But most importantly, it means a *social* situation of utter dependence on car use, because of the lack of adequate public transport. Every kilometre of travel pays a heavy tax in fuel costs. Some 30 to 40 per cent of the population in France's immediately peri-urban areas has no access to public transport.[3] They have to cope with this situation even though they have never had to travel so many kilometres between different places. At this point it is worth making a historical comparison, to get a better sense of mobility today and how it has been affected by the geography of networks. In 1800, the average person in France travelled no more than four or five kilometres a day. Curiously, the number of journeys per person has not itself increased these past two centuries. We still make no more than three or four journeys a day. But we are travelling a daily average of forty-five kilometres. This is also a recent development: it is some nine times further than was the norm fifty years ago. So 90 per cent of people in peri-urban areas are forced to have a car. The longer distance covered was supposed to be offset by the speed of travel – which has, indeed, got ten times faster. The sad consequence is that 80 per cent of fatal road accidents occur in these under-served peri-urban areas.[4]

Fibre-optic discrimination

Internet access offers an even better example of how people's unequal access to networks produces social fragmentation. Our ability to access thousands of essential services depends on being online. A decade ago, four private firms were tasked with rolling out fibre-optic technology across France. The aim was to fit out 100 per cent of the national territory by 2022. Yet, as of that date, some 30 per cent of France was still not covered. This did not reflect any lack of technical know-how, but, rather, the fact that these companies obeyed a purely market logic. The result was a fiasco. The only thing that counted was these private operators' refusal to pay to roll out fibre-optic cable in areas they considered unprofitable. Indeed, densely populated areas are well connected. But, twenty-five years after France took its first steps with the Internet, there are still 7.5 million people who have to deal with a poor-quality connection. Here, we are not just concerned with user comfort, but also with being able to use a service properly. For example, people with a poor connection may not be able to attach a file to an online form. Can we really live without the Internet, any more than we could live without electricity? Perhaps someone could tell us how. Having a proper Internet connection is now an absolute must for accessing the means of communication and information on which we all rely. And we should remember that today many government services and official procedures are only accessible online.

Ecological backlash

Having said that, we then need to consider the life of the networks themselves, within the context of the ecological crisis. Obviously, they help to fuel this crisis. But there is a knock-on effect. The ecological crisis is also putting the networks to a harsh test. It creates the conditions in which they

break down. Extreme weather events have a severe impact on certain ‘essential infrastructure’. Take power lines, for example. They were not built to withstand prolonged extreme heat. In France, when it is 40 degrees Celsius and the wind is blowing at 100 miles an hour, high-voltage installations fall down. The pipes, meanwhile, cannot absorb the rainfall triggered by the torrential downpours that are a feature of global warming. This latter thus drives considerable disruption. Neoliberal governments have not planned any global response. This is not the result of short-sightedness on their part, but an attitude consistent with their vision of the world. Neoliberals rely on the market to generate the supply of tools and services to deal with any situation. They have no overall adaptation plan. Under these conditions, the result is always easy to predict: sudden outages as soon as the network is hit. The fact that these networks are natural monopolies, added to the many layers of subcontracting, have only exacerbated the considerable deterioration of physical installations. This can be seen in the richest countries. This intersection between the demands of maintenance, the universalisation of networks and the impact of climate change is one of the unforeseen realities of the new order of things. It is really no surprise. But this is when dismayed communities learn quite how much the network has been allowed to fall into disrepair.[5] The climate crisis’s effects on these networks then generate political awareness.

Climate-driven blackouts

In 2019, residents of San Francisco Bay, one of the richest places on Earth, had to endure rolling blackouts. These were customers of a private electricity distribution company. That year, the Californian autumn was particularly hot and dry. This late-arriving drought was typical of the state’s new climatic conditions. It was combined with strong winds – these are quite usual for this region, but add in the hot conditions and you get a dangerous mix liable to spread forest fires. The supplier’s electrical

infrastructure had one notable characteristic: it was in ruins, being both poorly maintained and poorly monitored. This is no isolated case. Maintenance is always the first victim of neoliberal policies to reduce production costs. In this case, all this reached the point where it was becoming too dangerous for the company to maintain its activity in large areas. The company was forced to press the ‘off’ switch on part of its network, plunging several million Californians into darkness. This was bad enough, but at least it avoided the disaster of 2018. A fire caused by its power lines reduced 62,000 hectares of forest and 19,000 buildings to ashes and killed eighty-five people. This was no mere accident, but a result of the fact that California was also one of the first places in the world to privatise its electricity network.

This situation has now become commonplace throughout the world. For example, in summer 2022, Europe suffered its worst drought in 500 years.[6] Almost all of mainland France was hit by water shortages. But the situation was made worse by the poor state of the pipes. A chronic lack of investment, fuelled by the greed of large private companies and their irresponsible failure to maintain the pipes, has allowed the drinking water network to become a sieve, constantly shedding water. Nationwide, one litre in five is lost. It returns to the original aquifers, laden with all the pollutants now contained in the soil it passes through. But sometimes the loss is much greater. In the French overseas *départements* and in towns with under 2,000 inhabitants, half the water is lost along the length of the pipes. As a result, by summer 2022, 117 municipalities were without running drinking water. The mayors, left to their own devices, had to hastily organise supplies by tanker trucks to satisfy the inhabitants’ vital needs. No water pouring from the taps in one of the world’s most powerful economies! This pauperisation of our societies is becoming more and more widespread.

The art of maintenance

Generally speaking, productivism tends to drive the development of the disposable, the replaceable and the ever-new. The culture of caring for objects is certainly not one of neoliberalism's virtues. We see this everywhere as objects' planned lifespans constantly fall. But major infrastructure networks cannot be treated like plastic bottles, jeans or razors. Thousands of miles of high-voltage lines cannot be replaced by new installations every year. Maintenance and upkeep are therefore essential to a network's functioning. When maintenance is lacking, everything will soon deteriorate and break down. There are countless examples of this type in all the so-called 'advanced' countries, giving people a justified feeling of a 'fourth-worldisation' of their services. We see this in certain parts of Europe's private rail network, where trains never arrive on time any more, as well as certain air destinations, certain hospital emergency services and certain electricity connections. When this situation affects sensitive sectors such as nuclear power, this is bound to have one inescapable conclusion: inevitable, irreversible disasters.

The relationship between networks and their climatic environment is therefore set to become the tipping point for all kinds of social tensions. This kind of example is powerful enough to show us how climate crisis will brutally reveal the limits of the neoliberal model and, indeed, accelerate conflicts over access to networks. Along the various networks, the climate crisis will become a social crisis. We can already see how these situations are raising people's global political consciousness. It prompts them to question the logic of the entire system that makes such disasters possible. But we should not ignore the fact that the system can also play a part in the responses with which people seek to protect themselves. Individual water tanks, generators, zoning and private firewalls are all new markets. But they, in turn, depend for their production and distribution on networks that are also subject to the general conditions of climate change. No one can escape it. The intersection between the world of networks and that of

climate change is undoubtedly the most productive and dynamic source of the global conflicts of our time.

Territories versus populations

A logistics hub was set up on the edge of the Paris metropolitan area, four miles from the nearest railway station. Every morning, hundreds of workers from other working-class suburbs on the outskirts of Paris were seen finishing their journeys on scooters, which they then promptly abandoned at the side of the road. Such behaviour, compelled by the new geography of the boundless urban space, is now commonplace. The physical traces left on the ground by the geography of networks are, in short, the same ones determined by the new dominant economic order and its priorities. The policy applied to the population is then presented as the dictatorship of geographical organisation, itself subject to these standards. This is the subject of an ‘entrepreneurial’ policy for managing local territories; or this is, at any rate, what this policy is called by elected officials of all political colours who see themselves as managers. They bore their listeners senseless with pedantic comments on their pragmatic, results-oriented management of space.[7] But, ultimately, the logic of ‘managing territories’ is no longer that of meeting people’s needs. Sometimes it is quite the opposite, when the appeal to realism is used to justify intolerable new installations or useless major works projects. So it is easy to see why a policy change that focuses on people’s needs would also be a policy that focuses on the geography of those needs. This would profoundly change the territorial map.

The new network workers

Network workers

In a world whose population is mostly urbanised, and in which collective networks dominate the organisation of material life, it makes sense that a large proportion of the workforce is occupied in operating these networks. The proportion of the working population employed to operate networks is a strong marker of the current distribution of work. In total, if we consider all categories of networks such as energy, waste, water, information, transport, education or health, some 30 per cent of the working population is employed in them.[8] In the thirty-two countries of the Organisation for Economic Co-operation and Development (OECD) whose statistics can be directly compared, this proportion is generally between 25 and 30 per cent.[9] The data does not allow us to fully assess the intangible aspects of this development, at a time when digitisation is constantly extending its reach. This is also because, as the division of labour continues to expand, so does the scope for network building. Still, the size of the workforce which we can measure confirms one of the main characteristics of working activity in our time. This should be no surprise. Networks change the structure of capital and do the same to labour.

Just-in-time employees

The world of networks has extended the number and scope of a new category of employees with private, insecure status: ‘tertiary workers’. They circulate materials and information. The logistics sector offers a typical example of their working conditions. This sector’s growth, as a share of the total workforce, has taken place in an extremely short space of time, and in remarkable proportions. There are now as many people employed in logistics as in manufacturing in France. In 1982, this was far from true: there were three times as many in manufacturing as in logistics. This is, naturally, the result of the general organisation of production and globalised trade. But the number of jobs affected across the country is striking. The sector now accounts for one million jobs in France. If we also

include transport workers, this amounts to some 25 per cent of all blue-collar jobs.[10] This new distribution of labour in France is a direct result of the distribution of labour within the new international division of labour. It is also a direct effect of the general organisation of production. This is because it is the product of a mass-scale outsourcing of logistics tasks: a job which used to be carried out by individual companies, who now instead subcontract this part of their operations. This goes hand in hand with a reorganisation of work. In warehouses and on logistics chains, the logic of 'just-in-time' delivery is having a considerable impact on the content of the work required from employees. It encourages the breaking down of work into countless meaningless gestures. In many cases, the networked labour is increasingly monitored and alienated, for instance in Amazon hubs where workers spend all day subject to the orders of a digital voice command.

The networked precariat

In these conditions, alienation in the workplace takes on an extended form. Not only is the final object of production taken away from the producer, but their work itself is. It becomes a matter of incessantly repeating mechanical gestures, handling objects as devoid of meaning as deliveries with ever-changing contents. All this also has an effect in making labour more arduous. For most, precarious employment is virtually the norm. Logistics is the sector where the use of temporary staff is most intense, with one worker in four hired with this status. It is also the sector where the most unstable new working arrangements have been introduced most rapidly.[11] This is a product of the deskilling of logistics work, but also of the logic of widespread outsourcing. Warehouses are often simply subcontractors for their customers. The latter can change orders at will as their own activity requires. The result is instability in all aspects of the company's business: not just in terms of orders and employment contracts, but also in terms of who the owner is. Warehouses often change hands: it is easy to buy and sell

them without making major investments. Finally, the logistics sector is also well versed in playing with the different residency statuses of immigrant workers and the tightening of laws in this area to keep up the pressure on the workforce. This practice can be found in many network sectors. It corresponds to a system that creates racial discrimination in the workplace for its own benefit. In this way, the overlapping of different forms of class domination is converted into profit. Taken together, this explains the anger and determination when the time comes to take trade union action.

Them and us

In logistics, organised social conflict remains rare. But when it does break out, it often takes the form of a strong workplace militancy, far from the more routine forms of other sectors. During the Gilets Jaunes movement, the first connections between the protests occupying roundabouts and workplaces were linked to networked sectors, whether that meant transport or logistics platforms. For other, more traditional network sectors, for example public service jobs, these latter allow for a collective identification based on the service itself. In recent decades, major social movements to defend social gains such as the pay-as-you-go pension system have often been based essentially on strikes by network workers such as railway employees, gas workers, electricians and refuse collectors. But the hardest, longest and most often victorious struggles took place in other networks: hotel maintenance, platform logistics or retail distribution – in other words, where the alienation of work leaves the individual defenceless in the face of its sole result: an exchange of hours put in and the pay packet, with no other self-consciousness than that of ‘them and us’: the people who toil and the invisible oligarchy.

By virtue of their numbers in each hub, and their place in the general circuit of goods for both production and sale, the new network workforce has a strategic place in the fight to define social relations today. Meanwhile,

transport workers hold the possibility of blocking the whole system of exchange, so crucial to the globalised economy, and therefore of shutting off the many kinds of supplies necessary to keep everything going. Let us take another significant example from the French context. During the fight against the rise in the retirement age in 2023, activists from the CFDT union in Bas-Rhin, although not very radical, ended up turning to this type of blockade. From 11 to 13 April, they shut down the logistics platform at the Auchan supermarket's site in Vendenheim. They then did this again at a warehouse in Bischheim. The activists explained to the press that they believe this should be the new direction for unions coordinating at the national level: 'If we coordinate with the national-level inter-union [leadership], we can bring everything to a standstill.'[12] In terms of its social composition, status and self-consciousness, this workforce is at the interface between the traditional wage categories and that of the people as a global social actor.

The new bases of conflict

A new alienation

The world of networks is another instance of what we have called an emergent property: one allowed by the essential material realities of the age of the people, with its vast numbers, its endless urbanisation and the new age of capitalism. Access to these networks enables our existence, shapes our individual behaviour, organises our social life and underpins the political and geopolitical order around us. This access becomes a crucial social function, as a condition for all activities in all dimensions of reality. But these networks also have a massive impact on the conditions of the ecosystem. In a way, networks reformulate the class struggle by extending it

to every aspect of daily life and each of its moments. Far from erasing this struggle or leaving it behind, they root it in more people's everyday existence. Far from undermining the social basis of this struggle, they expand it. This is because new cohorts not integrated into the world of salaried work are entering the battle over networks: people ranging from students to artisans, pensioners and the unemployed. They stand opposed to the masters of the core networks, the new oligarchy made up of the collectors of user fees. This gives rise to a spontaneous conflict. Networks can be the key to extracting profit or the basis for meeting our collective needs, but never both at once. One logic or the other must prevail.

The networked people and the oligarchy

Our theory focuses its attention on one point. If access to networks is the condition for individual existence in social relationships, it is just as important for the durability of those relationships. Access to networks thus establishes the fundamental social relationship between each of us and the whole society. It determines the human condition of our time. No consumption of any kind is possible without this access. As such, access to networks, the definition of the content of their services and control over their operation are a global social and political issue. This applies to those who exploit them, to the workers who make them run and to those who need to use their services. In this sense, freedom and equality of access to networks are the most basic levels of individual freedom and the first test of being able to exercise this freedom properly. Control over these networks is a democratic demand, rooted in the individual's personal dependence on the means of existence which pass through them. But this is also an ecological issue: a way of controlling the impact of human activity on the ecosystem.

All this gives rise to a theoretically fundamental observation. Humans' relationship with collective networks is necessarily both the source and the central focus of the ecological, social and political conflicts of our time.

Dependence on networks thus generates the social actor at its core: the people. This means … us. In other words, the mass of people who cannot reproduce their material existence without this access. The context polarises the resulting struggle between ‘them’ and ‘us’. On the one side is the oligarchy. This is ‘them’. It has a vested interest in removing any citizen control that might challenge its dominance over the geography of service deserts and oases provided by its networks. The oligarchy needs to extend this geography by abolishing all regulating forces such as public services, legal standards and social opposition that would limit its power or the expansion of its project. On the other hand, there is the people, which depends on access to collective networks. The people ensures its survival and the reproduction of all aspects of its material and social existence. It must guarantee itself a secure position by winning unhindered access to these networks. The relationship between the people and the oligarchy is a battle over control of the networks: in widening or limiting access to them, in terms of ensuring that they function properly, and with regard to the content and quality of their services. In this battle of interests and power, we see a conflict over the fruits of the networks’ activity, and whether it favours the better provision of services or else financial profits.

But that is not all. On one side, this struggle is about appropriating as much wealth as possible. On the other side, it is a fight to regain power over our own lives, by controlling the means for satisfying our essential needs. One side fights to hoard wealth, while the other fights for power over the conditions of its own existence. One side obeys a class logic, while the other has a project for the human condition. One side is concerned with private appropriation, the other with creating common resources. One side is about individual privilege, the other about the collective power in the city encompassed in the word ‘citizen’. One side fights for a particular interest, the other for a general human interest.

9

The People

The return of the people

The people is a social group, formed by individuals' dependence on the collective networks that structure their urban existence. But it is also a set of human beings that goes by various names, and has likewise many different states of existence. First, it takes the form of a 'populace'. This term refers to the masses of people who settle in a given area: a crowd. It pursues all kinds of occupations. There is no other obvious connection between them, apart from the material infrastructure on which they all depend in their various comings and goings. This is, of course, also a set of people linked together at a deeper level by the countless social ties they build up in their real lives. These connections make each of us a member of a family or an association, a flatmate, a Facebook friend, a union member and so on. This 'populace' then makes up a 'population', defined by the social relations that shape its development. When this population mobilises around shared objectives, this makes it into a 'people'. The people is the political form through which a large number of individuals become a collective actor in society. We see this in the decisive conflict over the distribution of wealth and access to networks. This sets up a conflict

between the people and the oligarchy: an ‘us’ versus a ‘them’, the dominated people versus the ruling oligarchy. The people takes form in its opposition to the oligarchy, much like the conflicts of yesteryear between slaves and masters, serfs and lords, or indeed the conflict between the wage worker and the owner of the means of production. The people is the new political and social actor of our time, in the age of large urban populations.

Yet even if this people is the product of today’s large numbers, its rise also means the return of a certain ancient history in unexpected form. In 380 BC, the Roman plebs withdrew to a hill above the city, the Aventine. They refused to work until the patricians recognised their rights. The patricians had no choice but to accept. The people won the right to elect its own spokesmen, the ‘tribunes of the people’. These latter gained a right of veto over the laws passed by the small class of patricians in their Senate. The person of the ‘tribune of the people’ was deemed sacred and inviolable, as the deputies of the Third Estate of the French Revolution of 1789 later decreed for their own sake. They, too, faced the constant threat of physical or ‘judicial’ reprisals. Today we are seeing this situation raise its head again through so-called ‘lawfare’ – the instrumental use of the justice system to settle political scores in many countries going through social or political upheavals. But, compared to the days of ancient Rome, the present-day people is infinitely more numerous and socially more homogeneous. Of course, parliaments are supposed to embody the popular will. But, in many countries, these assemblies have been stripped of their power, in favour of other levels of decision-making that are less accountable and even less visible. We see this in the member states of the European Union, which is dominated by a central bureaucracy: the Commission. Appointed by governments, it is no more than rubber-stamped by the European Parliament. This parliament has no power to take the initiative over budgetary, fiscal or social issues. But the Commission controls the member states’ budgets and 85 per cent of their legislation.

The contemporary political moment is, then, the ‘age of the people’. It is marked by the emergence of a new political actor, which is both great in numbers and increasingly stripped of decision-making power. The people is thus constantly driven to fight for control of the matters that have been taken out of its hands. The people is thus the author of a new form of struggle for political power: the citizens’ revolution. In a nutshell, the aim of this book is to explain how this diagnosis is based in the social relations of our time.

Oligarchy

I have spoken of ‘them’ and ‘us’. But who are ‘they’? Here, it is worth at least briefly setting out a schematic portrait of the ruling oligarchy. Derived from ancient Greek, ‘oligarchy’ refers to a society in which power and wealth are held by a tiny clutch of people. They form a ruling class, extend their grip over the means of production and hold a monopoly on various networks and on the circulation of information. This is different from the plain old bourgeoisie – even if it is part of it – insofar as its numbers are smaller and insofar as its property ownership is far more extensive. Half of all existing wealth is owned by barely 1 per cent of humanity – so just a handful of the very richest.[1] Their wealth increased more in the nineteen months of the COVID-19 pandemic than it had over the last decade. Every thirty hours or so, another billionaire emerged, and another million people sank into extreme poverty.[2] The twenty-six richest billionaires have as much money as half the human race: so, as much as 4 billion people do! On average, those 4 billion people live on less than five euros a day. At the time of writing, the richest man in France, Bernard Arnault, was also the richest man in the world. His fortune is built on the crudest kind of superficiality: luxury goods. He alone owns as much as 20 million French people do. Even

if someone had been able to save the equivalent of €8,000 a day since the storming of the Bastille in 1789, today they would only have 1 per cent of Arnault's fortune. At the same time, 8 million French people are relying on food aid, 10 million live in poverty, and 300,000 live on the streets. Such is the law of the richest, which is based on extreme inequalities, and indeed revels in the crises which it itself creates. This oligarchy despises the people, keeps it under its thumb and deliberately keeps it divided through propaganda that relentlessly pushes reasons for different groups to be at loggerheads. It stirs up racial and gender prejudice. Islamophobia is especially routinely used, applying the strategy of the 'clash of civilisations' pushed by Samuel Huntington and consultancies from the United States.

Fear of the people

The financial oligarchy that dominates the contemporary age has granted itself the power to veto any political decision that does not serve its interests. Most of the time, its domination is simply the way things are. If this is ever put into question, this oligarchy uses the (usually direct) power of political and media influence to ensure that it gets its way. This allows it to place on the statute book the various exemptions and favours that suit its business interests. This class functions like a caste. It lives in a state of physical secession from the majority, with its own separate housing, transport, schooling, health, leisure, everyday supplies and so on. It separates itself from the people in every possible way. It is afraid of the people. Its fear is in fact well founded, for the people can directly fight it for power. This is always the case when the people stands up against the established order. Its political agenda springs spontaneously from the social relations of everyday urban life, namely the property regime governing real estate and the collective networks necessary for our day-to-day existence. In

the city, private property dominates these means of existence. From housing to services and supply networks, we have to pay those who own property just to access amenities that we need for life itself. The result is a spontaneous conflict, which may reach varying degrees of intensity, depending on the available means of mobilisation.

Mind control

Faced with such a mass of people, the oligarchy can preserve its authority only thanks to powerful tools of domination. This is not just a question of repression or the various material or legal means that this might involve. The aim is, above all, to control people's minds. This control is exerted via countless everyday channels. The media are obviously crucial in this regard. In the United States, 90 per cent of the media is controlled by just six corporations.[3] But when they start talking about political or social issues, they are quickly discredited. There can be no compromise with these media and their role in policing society. But by unmasking their role, we gain a better public understanding of the reality that the people is subject to deliberate ideological conditioning.

In fact, this is not the most difficult part. Indeed, all the polls tell us that there is massive popular dislike of these media. In France, this disgust is rooted in an age-old opposition to past eras of clerical domination, whose moralising and paternalistic preaching these media today substitute for. So the fight to impose order on people's minds has to rely on other tools. The existence of such a social order essentially depends on its ability to produce a dominant ideology, suited to masking the reality of social relations. The oligarchy's soft power is made up of clichés and fashions, cultural preferences and consumerist frustrations, which are promoted in order to encourage the dominated to try and emulate their masters – and which

thereby hand legitimacy to this same oligarchy. Above all, this oligarchy needs to break up the front of opposition. Across the world, the methods used to do this are largely similar, amounting to a few crucial tools: stirring up jealousy and egoism, and naturalising social discrimination by racialising it or attributing it to a particular gender. The essential aim in each case is to prevent the development of a popular union able to rally the people in a single collective project. When the people is driven to exasperation, the crudest arguments will soon be rolled out in order to stop its grievances from cohering in a single front. The oligarchy and the media class claim to achieve a happy medium by demonising ‘all extremes’ as a single mass of sinister ‘populists’. The various influential figures connected to the oligarchy use this accusation of ‘populism’ as a blunt instrument. It is, of course, an insult. Yet we rarely see them define the doctrine which they are combatting using this word. Most of those who so despise the people see it as an unruly and, above all, potentially violent enemy. No opportunity is missed to paint a repulsive caricature of the people. This is where the media class comes in, to do its job of relentlessly projecting this same horrifying image. This is what whets the media’s appetite for all manner of news stories. Indeed, this concern to demonise the people is well illustrated by the habitual social make-up of the more troubling cases which they choose to highlight. We also learn this from the vision of society projected by the selection of individuals deemed worthy of being ‘seen on TV’. The overwhelming choice is in favour of upper-middle-class males. The statistics for French television speak for themselves.[4] Three-quarters of the people featured in programmes and dramas are managers or bosses. Only 4 per cent come from the suburbs, 3 per cent are from France’s overseas territories and 14 per cent are non-white. Women, many of whom are at the lower end of the wage scale, account for less than 39 per cent of the cast. Crime victims are defended by ‘vigilante’ police officers, who

constantly indulge in all sorts of abuses of power. Countless drama and entertainment programmes tell us that such conduct is ultimately justified.

Jojo the Gilet Jaune

The idealisation of a society that has supposedly ‘become middle-class’ is the best way to keep at bay a feared and mythologised people. Faced with the Gilets Jaunes movement, there was a great outpouring of this kind of contempt for the lower orders. The Gilets Jaunes were variously accused of being crudely anti-environment, then racist, then homophobic and even antisemitic. No scurrilous caricature went unused. The president himself derided an imaginary ‘Jojo the Gilet Jaune’, complaining that such a ridiculous figure should not be given equal standing on television as a minister or an MP. Even before Macron’s intervention, his minister – that is, his mouthpiece – had mocked the Gilet Jaune by reducing his demands to a matter of ‘the right to smoke at the wheel of a diesel car’. Such an attitude is the norm in any moment when citizens are rising up. This is done because the middle parts of the hierarchy of incomes and social situations, in its unstable position between ‘those at the top’ and ‘those at the bottom’, has the potential to swing between the two. When these layers emerge on the political scene, the powerful have to try to drive a wedge between them and the common people. To do this, they summon up all the imagery traditionally used to portray the people as monsters. The people then turns into the ‘hateful mob’ publicly vilified by President Macron in his televised New Year’s address for 2019! Around the world, the political leaders of this ‘mob’ are likewise presented as monsters.

The self-image of the powerful

The emblematic figures of a centuries-old imaginary again surface from the collective unconscious, driven by fear. In comes the cavalcade of women and children warped by their own violence: the return of the people who do not know their station, the women of yore who ‘showed their hair’. We watch a carnival of images in which all kinds of uncooperative and stubborn types are shown remonstrating. They appear a bit like the masks of the ancient comedies, in which the open mouth symbolised the abyss leading to the Underworld. This is the mouth of access to the world of darkness, of the unknown, of the inside of this intimate body which bourgeois imagery always keeps at a distance. Our rulers are inevitably caricatural. This is because they never see their dominant position as a product of social relations, but rather as a natural condition peculiar to their own persons. They often see their social station as a gift of nature, sometimes an inheritance, even if it did require study and qualifications. In truth, the struggle here between ‘them and us’ is not just about who has the best arguments, but also about emotions and self-image. We should not be surprised by this – and nor should we fear it. The people cannot be united by common grievances and reasoning alone, even if these factors are evidently decisive. Dignity, justice and a sense of merit are the factors that rally the people together.

With the people

The vast urban population is already with us – and here to stay. But what concrete processes will allow this *population* to become a coherent *people?* Civic awareness is built up through everyday, spontaneous conflicts, in situations where the most routine reflexes take form. Once, someone congratulated me just because I happened to be taking a metro train in Paris. ‘You use it just like the rest of us,’ they said. So being an elected

politician and ‘seen on TV’ was enough to be identified with a ruling estate that had no need to use the same transport as ordinary people. To tell the truth, this spontaneous identification of me with ‘us’ gave me immense pleasure. I understood what it meant, even though I almost always travel by metro in Paris, without prompting similar surprise. This also backed up the abstract thesis I have just outlined. The public transport network here defines a social identity. For me, this comment was like a certificate of authenticity. I identify with the powerful statement that Maximilien Robespierre made to the Jacobin Club on 2 January 1792: ‘I am of the people, I have never been anything but that, I want to be nothing but that; I despise anyone who purports to be something more.’ But, to move further from the purely anecdotal and towards the level of theory, I think it is worth emphasising how both my friends and I answer when we are asked to explain what our ‘populism’ is all about. We are regularly asked this question, as a means of attaching this label to us without quite saying so. One of La France insoumise’s basic rules of communication is that we do not give in to such tricks. We must never wear the hats handed out by the enemy. Especially when – as in our case – we are building a new field of political semantics. When your opponent gives you an identity card, they are also filling it with content. They become the master of the game you are trying to play. That is why, following Robespierre, I would rather say I am not ‘populist’ but ‘with the people’. I won’t accept the vulgar connotations that the word ‘populist’ takes on in the mouths of our opponents.

The Union of the People

These people share the urban social condition, as well as a more or less direct dependence on capitalist relations of production. But this urban condition is directly part of the social relations organised by capitalism. The

segregation of poor neighbourhoods and the problem of access to networks are also under capitalist control. The destruction of workers' social statuses, as they are thrusted into the conditions of a precariat, have plunged people into a new field of activity, where they are once again able to act collectively. This social reality forms the basis of the broad mobilising strategy called the 'Union of the People'. The expression seeks to reflect the diversity of the people, such as it actually exists, and the need for it to act in unison. What is more, in the city, the people are up against the real master: the oligarchy. The handful of individuals who profit from urban segregation are fully part of the financial sphere, mostly being concentrated in banks and insurance companies. They control the real estate and urban infrastructure markets with the help of their political and media-elite goons. The oligarchy, and the gilded caste that serves it, are working to privatise vital public services, making people redundant, evicting them, depriving them of services and so on. With the formation of the Union of the People, our rulers meet for the first time with a line of resistance that crosses the whole battlefield. The age of the people, our contemporary era, is the age of the people's struggle against the oligarchy.

Wage earners and the people

Much has been written about the concrete reasons why the workplace is not the *central* or *exclusive* site (and the adjectives count for a lot here) for the development or expression of a general political consciousness. Today's workforce is precarious in status, employed in smaller companies, with union membership continually under attack or repressed, and with a constant threat of mass redundancies. This workforce is under pressure from mass unemployment, offshoring and branches of production going obsolete. When some investment fund or faceless multinational makes a

decision, workplace protest has a hard time putting up effective resistance. But labour has not abandoned the scene, and it has not lost its role. Rather, like the rest of society it has redeployed on a different terrain. It has not lost its workplace role but expanded its role as part of the people. Even in decades past, the islands of proletarian strength were surrounded by the peasant masses and the shopkeepers and craftsmen in the cities. Workers in fact constantly combined with the wider urban masses. Of course, by defending their interests in the workplace, workers are always learning to identify the mechanisms of their exploitation. Similarly, their occupational skills teach them to recognise the management and strategic errors that put the company at risk and devalue its service or product. When they form cooperatives to resist their workplaces being closed down, workers surely offer an exemplary alternative to capitalist ownership. But this is not the starting point for their political consciousness and their furthest-reaching forms of action.

Popular consciousness

Indeed, something rather more than that is happening today. The new social consciousness is developing in connection to the wider people with whom workers rub shoulders at every moment of their lives. They share the same anger at shoddy transport, low-quality housing, inadequate social services and lack of access to the networks on which they rely. In this context, the political consciousness of wage earners is expressed in at least two moments that are clearly distinct from all others. The first, of course, is when they see themselves as members of the city and their social aspirations extend to all the various issues connected to urban life. In these struggles, the reference point is often the lessons they have learned in trade union activity. The other such moment is when the struggle at the

workplace level is experienced – and, indeed, publicly presented – as a struggle for the general, social interest. This is increasingly the case with protests in public services such as railways, electricity production and distribution, and the health care sector, to name just a few. Sometimes, the workers involved do not even mention any self-seeking sectoral demand. What they instead highlight, in these circumstances, is the general interest of the entire population in the battle that is being fought. In these cases, it is easy to see how their action points towards a broader social consciousness. Such consciousness is characteristic of the ‘people’ produced by large numbers and urbanisation.

The people and popular sovereignty

Still, in seeking to show that the people is indeed a historical actor, I do not want to limit myself to descriptions ‘as seen from the outside’. Our evolution from population into people originates in material factors, working the human putty from within with its own drives and motivations. The people’s own political actions make it into a political subject.

I have said that the population becomes a people through collective action, when it occupies streets and squares and roundabouts. This reflects a situational logic. This is, most fundamentally, about putting space at the service of the population. In other words, it is about imposing control over the services on which urban life relies. You could say that the people makes these services its own. The people exerts this control both through the sites where it chooses to act and through the demands that it puts forwards. There is a simple name for this process: sovereignty. It is precisely because it asserts its sovereignty that a population becomes the people. This is the realisation of a deep tendency in human behaviour. As the ethnologist Maurice Godelier has taught us, human communities are not primarily

shaped by family ties.[5] This may seem an odd or even counterintuitive claim. But it is nonetheless true. These communities are, instead, shaped by the cultural ties that exist within and between them. These cultural ties provide the basis for assertions of sovereignty over the spaces that they occupy, and indeed over the individuals living there. It is also striking that in the course of a collective action, a genuinely common decision-making body is immediately formed. The community then seems to take over from the authorities who have let it down, and to establish its own enforceable law. Tellingly, this body is often set up – as in the recent Egyptian, Tunisian or Ecuadorian cases – to guarantee the security of a neighbourhood during the revolutionary events themselves. This is the most typical sovereign function. Sovereignty is, therefore, not an accessory to power, an ornament to the identity of a human group, but rather its starting point. Sovereignty is both the political motor of a society and the glue that binds it together. The French socialist Jean Jaurès was surely not mistaken when he said, 'Political democracy is expressed in a central idea, or better still in a single idea: the political sovereignty of the people.'[6]

The constituent people, or nothing

So the thesis we are working with here is that the population becomes the people when it asserts its sovereignty over the space it occupies and over the rules by which it is itself organised. This also tells us why constituent processes are so crucial to the revolutions of our time. For, when the people writes a constitution, the most important thing it does is to identify itself in its own eyes. In a way, the people constitutes itself: for instance, when it declares what rights it has, when it organises the way it makes decisions and when it defines the powers that will make this all work. The constituent process is the most fundamental act of the people's conquest of sovereignty.

It is not an add-on to the revolutionary strategy of our time; rather, it is its political vehicle. Thus, to fight for the calling of a constituent assembly is, first and foremost, to act for the people's existence as a historical actor. Marx said that the proletariat has to be revolutionary, or else it is nothing; and the people has to be constituent, or else it is nothing. This fact itself runs counter to a dismal contemporary trend. Today, everything is prepared to avoid people taking their own fate in hand. This is only logical. The reign of finance accepts no external regulation. Political power produces laws and regulations, of which it is the sole source. The oligarchy cannot stand this. Everywhere it acts to 'dissolve' the people as a political subject. A case in point is the organisation of the European Union since the Lisbon Treaty prepared by Angela Merkel and Nicolas Sarkozy. This determination to keep democracy out of the arena of decision-making is compounded by the withdrawal from politics of so many millions of people who feel fed up already. We then have mass abstention, which takes on the guise of a self-dissolution of the people. The ruling classes are delighted to see this development. Top pundits are always on hand to fawn over what they label 'democratic fatigue'. Such outlets criticise the excessive number of elections. They depoliticise the issues by over-personalising the clashes involved in politics. They keep anyone who dares upset their simplistic picture off the media stage. In short, they play an important role in maintaining order in people's minds.

The political people

All this underlines the importance of a formal reconstitution of the people as a political subject. By this, I mean the need to convene a constituent assembly. This is a far cry from the idea of a new constitution drafted by some expert committee made up of government cronies. Without the

convening of a constituent assembly, and without the many kinds of public hearing that such a body would have to organise, a constitutional rewrite would indeed just be another power grab. We have seen enough of this before. In France, for example, since the 1958 Constitution was promulgated, the text has been changed twenty-one times without any popular consultation or input. The aim here is not to fiddle the rules, but to seize power. The Constituent Assembly for the Sixth Republic that I am talking about in France is not some technical arrangement to fine-tune the machinery of state. It is a revolution in the political order, in order to establish popular power. Certainly, the furthest-reaching single action that this involves is the preparation of a new constitutional text. The proposed organisation of powers must achieve a balance between the need for stability and the continuity of democratic public authority. That is a given: there can be no question of creating weak political structures. Indeed, we know the price of that. If political power is lacking in continuity, locked into short-term lengths, and does not enjoy widely recognised authority, then power is in fact silently handed over to those circles who do have the power of the long term on their side. Which is to say, the permanent technocrats of the state and the financial oligarchies whose influence reaches far and wide. The former often complain about the intellectual unpreparedness of politicians who are always ready to latch onto anything that they might come up with. The financial oligarchies, on the other hand, are organised into lobbies, which are energetic, work methodically and are as sticky as glue. They form outright swarms, buzzing around parliaments and political leaders. In France, 60 per cent of lobbying activities are aimed at influencing the government and parliament.[7] On average, there are up to nine lobbyists for every Member of the European Parliament (MEP).[8] In reality, there are many more than that, since a good number of MEPs are never approached by lobbyists. You can guess which ones they are.

Definition

I have defined the people in terms of its arrival in the strictly political sphere. In this framing, the people exists because its political action declares it to be an actor in history. But, first and foremost, I am talking about a reality in society itself. The materialist tradition has a lot to tell us here: and we should never lose sight of the material basis of the new forms of conflict in which the people is the key actor. People produce and reproduce their material existence by accessing the collective networks which run through every aspect of urban life, and which are crucial for their survival. The people, as a participant in the mode of production, has a materialist definition: it is moulded by the property regime that governs these networks, their place in the overall process of capitalist accumulation and the alienation that results from their commodification. But the people is also the agent able to overthrow this mode of production and collectively to take economic life back in its own hands. The people that takes action corresponds to a specific model of conflict, which is not just the same as the various models we could look at from the past. To overlook this difference would, in fact, blind us to the revolutionary content of what the people is fighting for. Networks tend towards being social in character, but this only really becomes true if they are collectively managed. It is this that allows them to liberate their users from material need. The people is a product of the city and its networks. But it also acts in a world in which the question of the biological rights of the human species is also bound up with the content and the operation of collective networks. The people is the historical actor destined to lead society on a different, ecological course. It develops its own ecological demands, based on the conditions of its social existence. It then draws up the outlines of a new basic programme: a transitional programme. In other words, this means action to break away from the old system, and leading towards a new order of things. This latter is at first defined simply

as a set of concrete measures, without giving any label for the society that results.

III

The Citizens' Revolution

10

The Grain of Sand

It’s back!

Revolution is back. It seemed as if it had been buried, back in 1991 when US president George H. W. Bush announced that a new world order was with us. But after an initial wave of revolutions against authoritarian regimes in Latin America at the end of the twentieth century, revolution is back with a vengeance, across the world. On 17 December 2010, a young street vendor set himself on fire in Sidi Bouzid, Tunisia. His act triggered a series of revolutionary events in that country – and then in Egypt, Libya, Syria, Bahrain and Yemen. That same year, around the Mediterranean, millions of people occupied squares in Spain and Greece, making not this or that sectoral demand, but a total, systemic change. A few months later, similar events unfolded in New York, during the Occupy Wall Street movement. By 2019 everything was ablaze! The French got things going by occupying roundabouts across the country, wearing their yellow vests. Even this followed other uprisings in French Guiana and the French West Indies. Then came the turn of the Algerian people to mount its ‘Hirak’. Autumn 2019 saw revolutions erupt almost simultaneously in Lebanon, Iraq, Chile and Ecuador. But Asia was not to be outdone, with the Umbrella Revolution

in Hong Kong, the Thai revolution in 2020, Myanmar in 2021 and Sri Lanka in 2022. Then, 2023 saw a historic movement in France, opposed to the raising of the retirement age, which itself followed a long string of social and political conflicts in this same country. I could mention many others.

Of course, all these events have their own history; they each took place in their own context and followed their own particular course. But, if you look at them more closely, you quickly see how many features they have in common. It is almost disconcerting; it is if they were borrowing words from each other, imitating each other, recognising themselves in each other. In fact, they often share the same slogans, the same objectives and the same ways of behaving. There is a good reason for that: these events are all the offspring of the same situation, the same essential impediment. Globalised capitalism is incapable of organising the networked society, except as a society of shortages for the many. But we could hardly say that these events were simply triggered by the looting that is done for the sake of an oligarchy's profits. For they also expressed other fundamental drives in society. The feeling that things are breaking apart, the impossibility of leading a normal life, the arrogance and indifference of the powerful: these are the factors that set things ablaze. The citizens' revolution is the expression of a society that is trying to unblock itself, to free itself from the straitjacket that stops it fulfilling the tasks of the day and satisfying its essential needs. The effects of climate change will only make such situations more common. For our purposes, I think we should first make a careful effort to decipher the mechanisms and behaviours at work in this new revolutionary phenomenon. It is worth studying it with this purpose in mind: to learn how to ensure that when the decisive moment comes, the revolution emerges victorious.

Why ‘citizens”?

In the expression ‘citizens’ revolution’, both words count. This does not mean the old socialist revolution – a term that can no longer be mentioned, in case anyone should get frightened. Of course, many of the tasks of this revolution are the same: the struggle for equally good living conditions, collective ownership of common goods and resources, the decommodification of essential sectors of life, mass education, democracy in all fields of life and so on. In this sense, the citizens’ revolution is indeed about winning the power to organise human society as a community whose members have inalienable equal rights. In democracy, in the republic and in the people’s insurgent force, this power is deposited in the one same figure: the citizen. This noun should be understood in its fullest sense. It refers to both a social status and a function that needs to be taken on. Citizenship is that function. It consists of exercising power: the power to decide. In other words, to be a citizen is to concretely take control, in the broadest sense of the term. In a democracy, this power is exercised by all those who have the right to vote. The revolution is hence called a ‘citizens” revolution because it refers both to the actor and to the goal of the action: citizens’ power over everything that requires decisions to be taken.

Why ‘revolution’?

The citizens’ revolution thus takes two forms. The first is that of a spontaneous collective action; the second is the programme and collectively agreed strategy of a political organisation when it takes up this project, as we are doing with La France insoumise. But first, it is a revolution in deed. Wherever it takes place, it produces a more or less frontal rebellion against the government and the powers that be. As it unfolds, it goes through forms and phases that are often the same across the globe. This is another sign of

the similar conditions which these uprisings result from. Experience points to at least two such factors. First are neoliberal policies aimed at reducing the size of the state and public services. After all, the transfer of essential services to the private sector is always socially discriminatory – and then seen as unjust. Added to that are the various disasters linked to climate change, and the environmental damage caused by the system of production. This spreads chaos and demonstrates how powerless the market is to solve people's problems. These factors lay the foundations of the contemporary citizens' revolutions.

The need for a constituent project

Having reached these conclusions, we then draw up a political programme to put to the electorate. This programme takes up the content of the revolution that is to be carried out. I say 'revolution' because the changes needed would totally change the bases of the system. This revolution targets three pillars of the current social order. First, property! Some people consider this to be a fundamental, inalienable human right. When citizens' revolutions are in progress, property is instead treated as a simple right of use by the owner, especially when it comes to common goods such as water, air, land, knowledge and so on. Is it really acceptable that these resources are monopolised and monetised by a few, while other people see them being sold off and denied to them? You can hear people asking, on what justifiable grounds can these resources be appropriated, and a tribute payment be demanded simply for accessing them? Clearly, this has no justification at all. And if this common resource is essential to the survival of everyone, why should it be private property? Here, the only justifiable option is collective ownership. But when it is impossible to keep taking more and more, and the available resources need to be shared, who will do

the sharing, and who will decide what each person's share will be? The only force that can legitimately decide is the community of citizens itself.

The second focus of revolutionary change is the reversal of the current hierarchy of norms. Today, 'free and undistorted competition' is enshrined at the top of this hierarchy, and no other rule or law can stand in its way. In its place should be solidarity, cooperation and the 'green rule', filling this same role of a norm that guides all decisions.

The third focus of the citizens' revolution is the institutional order. This means the powers and authorities around which the city is essentially organised. For example, the new republic will have to decide whether it will be parliamentary or presidential, federal or not, plurinational or not. But as well as these quite traditional political choices, it will also have to head in new directions which we can identify thanks to recent experience. For example, several Latin American countries have established an 'electoral authority'. This new institution is responsible for all aspects of organising elections and guarantees that they are fair.

In addition, new rights have been defined for individuals and other entities. In Ecuador and Bolivia, their constitutions recognise nature as a subject of law. Argentina guarantees each individual freedom of choice of their gender. The Tunisian Constitution of 2014 sets the goal of gender parity in assemblies – an obligation unknown to France or Britain. We could say that another constitutional imperative today is the right of recall, to ensure the accountability of elected representatives. And is not the same true of the right to self-determination, in our choices over fertility, or over how we die?

When we look at the full scope of the citizens' revolution, we see that it has a constituent role that extends far beyond the usual political concerns.

At first, it's like never before

The contingent event

For Karl Marx, the outbreak of revolutions was akin to an uncontrollable force of nature. Marx mocked those who presented them as the result of plots hatched by small cliques of conspirators. I must say that I agree with him. An analysis of the outbreak of dozens of contemporary and even past ‘revolutions’ confirms how far ‘revolutionary’ events begin as spontaneous eruptions, and not as the product of some concerted plan. In most cases, even the people most involved are taken aback by the process that has started to unfold. The particular starting point for the events often seems out of proportion to the earthshaking consequences. Of course, with hindsight, it becomes easier to see that the trigger only had such an effect because of many deeper-rooted causes. But the revolutionary event also depends on the element of contingency. It may be possible to feel that revolution is imminent, but we can never see in advance when it will actually happen, nor the form it will take. This seems to have been the general rule for a long time. In 1789, no one planned to storm the Bastille. In 1917, all the official and clandestine political parties, including the Bolsheviks, opposed the women’s march to Petrograd, and even more so its continuation across subsequent days. Something unexpected happened: a Cossack sent to repress the women defected and shot his officer. This caused a domino effect: everything fell apart, and the tsar abdicated. Of course, the element of chance did no more than hurry along the inevitable.

The trigger

Every citizens’ revolution over the last three decades has always started from some totally contingent trigger. In each case, this has had powerful effects which spread throughout society, to the point that they jeopardise the ruling system and sometimes cause it to splinter. No one foresaw this starting point; nor did anyone imagine that it would grow into such a

hurricane. Of course, this ‘chance event’ also has a certain ‘before’ behind it, made up of all kinds of episodes of struggle over the course of time, which may well be sporadic, discontinuous and localised. Then there is also an ‘after’, a concentrated phase of generalised, tumultuous activity. This explains why what comes next is always so out of proportion to the starting point. I could give a whole list of examples, but here I will mention just a few of them. In Chile, the contingent event that lit the touchpaper was the decree to increase metro fares in Santiago on 6 October 2019, though the rest of the austerity plan being enacted had many other, more damaging, measures. In Lebanon, it began with the ending of free use of a well-known messaging service on which many domestic and international communications relied. In France, the Gilets Jaunes movement started from opposition to a fuel tax hike. In Ecuador, in 2019, it was again about fuel: a subsidy being cut. In Sri Lanka in 2022, the people had been fighting for three months already against record inflation and petrol and electricity shortages. But then the next demonstration stepped things up a notch – and the people suddenly invaded the presidential palace. President Gotabaya Rajapaksa fled by plane.

It spreads

Mohamed Bouazizi’s self-immolation in Sidi Bouzid, Tunisia, in December 2010 was not the first such suicide. Nor was it the first show of rebellion in the region. Yet not only did this act spark off the Tunisian revolution and the ousting of President Ben Ali, but it started off the whole process that came to be known as the Arab Spring. It set the whole of the Maghreb and part of the Middle East ablaze! This had a direct contagion effect. Ben Ali’s flight from the capital on 14 January was greeted by a solidarity rally in Egypt on 16 January. Cairo’s Tahrir Square was invaded by people demonstrating against the established authorities, soon followed by the Puerta del Sol in Madrid. Eight Egyptians self-immolated. On 11 February,

Egyptian president Hosni Mubarak and his government fell – and fled. It had all played out in under a month. Sometimes a chance event arrives from the outside. Such was the case in Mauritius in 2020, when the government proved unable to cope with an oil slick that threatened two sectors – fishing and tourism – vital to much of the population. But who could have foreseen this oil spill? The contingent event that triggers a popular uprising may be directly political in nature. In Iran, for example, the regime narrowly avoided being overthrown after a young woman was murdered in prison. According to the religious militia, she had been caught not wearing her headscarf properly. But how many times had such abuses been committed before that, without there being any popular retaliation? Here I have repeatedly mentioned an extreme end result: the powers that be collapsing. But there is more to a revolution than that. Nor does it conform to the simplistic, mythologised imagery of the *grand soir* – that magical night when everything changes. A revolution is a long-term process that unfolds over time. If we want to analyse it seriously, we need to recognise the importance of the phases and the events that mark the development of this process. The contingent trigger is essential, but the context is even more crucial. For it is made up of a chain of causes and effects, linked together by the laws of determinism. So how do the elements of chance and necessity combine? That is what we need to ask.

A pile of sand

I do not want to turn the ‘chance event’ into the magic wand of history for revolutionaries waiting for great upheavals. There is a law of organisation that links an isolated, minor event to a whole cascade of disproportionate consequences. I am taking this law from the realm of physics, but it is also useful in analysing history. To understand what I am describing here, it is worth looking at what these sciences call ‘self-organised criticality’.[1] Let’s take a classic example. Imagine a small pile of sand on a small plateau.

Grains of sand fall onto it, one by one. The grains that make up this pile are directly linked to each other by their proximity, and anything that affects one grain ends up affecting all the others. The pile grows and grows. At some point, an avalanche occurs. Part of the pile of sand falls down the slope and grains are swept off the plateau. No one knows when this avalanche will occur, or how big it will be. All we know for certain is that it will happen. And we can identify the ‘supercritical’ state where the probability of the avalanche increases dramatically – as well as its opposite, the ‘subcritical’ state. The ‘supercritical’ state is one where the pile of sand is well consolidated and where, for example, you can even see a bump on the slope of the pile. Conversely, the ‘subcritical’ state is one where very few grains have fallen, or where the avalanche has produced a depression in the slope of the pile. Here, we have a system where a chance factor (the grain of sand that triggers the collapse) and necessity (the avalanche) combine in a way that can be set in a deterministic chain of cause and effect. There are countless such ‘systems’ all around us. This law of organisation is at work, in all its splendid simplicity, in thousands of phenomena considered highly complex. Of course, there is a precondition for this to happen: the elements of the system must be highly correlated, as in this case with each grain of sand and the neighbouring ones. The critical state that sets things off is not a faculty of the individual components but an overall property of the system as a whole. The supercritical state of the pile of sand causes the avalanche, not any one grain of sand. Here we are talking about a determinism made up of probabilities.

But I would like to draw closer attention to one particular point. All the elements of this system are linked together. Not each one directly with all the others, but each one with all the others through its link to its immediate neighbours. The avalanche can be seen as an example of the spread of information. It is a contagion effect. Readers who have been paying close attention will remember what I wrote earlier about human communities and

the importance of the connection between their members. Our concern here, after all, is not the behaviour of piles of sand, but that of human beings living in a society.

The human world as a pile of sand

We can see that society works rather like this pile of sand, with all its elements closely correlated to each other by way of proximity and communication. When this globalised reality continues to build up additional elements on one of its ‘layers’, this eventually changes the way the system functions. It does not matter what kind of additional elements that means. For example, it could be the number of human beings. On a global scale, this year 280 people will be born every minute and 109 will die. The positive balance of 171 births per minute will fuel the supercritical state. But what qualitative factor could trigger the avalanche in any moment? The number of unemployed? The number of thirsty people? A financial bubble? A local disaster? A depression of the money supply? An oil spill? Another suicide? A new pandemic? A stock market crash? I could stretch the list to include any number of things that might happen but would all be ‘unforeseen’. The same line of argument obviously applies to smaller scales, such as an individual country. There, people are much more closely connected to each other by all sorts of permanent links. And this is even more true in a neighbourhood or a business. All in all, this is a qualitative approach. It does not deny the relevance of the traditional analytical tools used by the various schools of political thought. The events involved in a class struggle can be seen as a self-organising criticality, whose various stages are triggered between the super- and subcritical states. The system then itself changes state. This may produce a social crisis or else set history on a different track – in other words, a revolution. I will add something more. It is often difficult to accept that the unpredictable human community does indeed operate according to laws of organisation. Here it is worth

remembering that freedom is not compromised by determinism, even a probabilistic one. It is a bit like the law of gravity: it does not tell you whether you should go up or down the stairs. But, when you are on the stairs, it is best to bear in mind that this law exists.

Phase transition

In any case, it would be wrong to isolate the trigger event so narrowly that we end up forgetting the previous context – and, most importantly, the new context that comes after. The change from one state to another demands proper focus on the new facts that are in play once the process has entered into a different phase. The event will then continue developing under the same law, until the next critical point arrives. To analyse the situation and fix a strategy, we need to identify the crucial moments at which the process moves from one stage to the next. The process is constantly punctuated and re-energised by tipping points, turning points and milestones. The media as well as activist commentators have been inventive in coining names for these: threshold moments, plateaus and so on. I prefer the colder expression ‘phase transition’. It refers more precisely to a process observed in all matter, particularly when it changes temperature. The same body of matter can take on completely different characteristics depending on the various states that it goes through. For example, water can be liquid, solid or gaseous, depending on its temperature. In reality, each phase corresponds to a greater or lesser agitation of its particles. The characteristics of popular action also largely resemble these physical phenomena. Thousands of people may be in an agitated state, or else in an ebb phase when the opposite is true. One of the main barometers today is the activity of smartphones, whose geolocation makes it possible to establish both the intensity of communications and their spatial distribution. Such observation has been conducted with regard to recent uprisings. It has been successful in

counting the number of participants and measuring the intensity of the event based on how dense the exchange of communications is.

Growing over

The intensity of these communications points to the sheer volume of energy coursing through a social movement. We should understand this quite literally. The mounting volume of exchanges and dialogues changes the state of the phenomenon concerned. This development constantly happens as the movement grows in self-confidence and becomes more exasperated at the behaviour of the political powers that be. This is known as the ‘growing over’ of a movement’s demands. This term refers to the way in which the initial demand extends to embrace other related issues also. But above all, it refers to how a demand moves from one level to another, for instance from the social level to the level of politics and democracy itself. To take another French example, the Gilets Jaunes movement, which began with a fight over fuel prices, then turned most of its attention to the demand for a new right to call popular-initiative referendums. This emerged as a response to the blocking of the situation by authorities who had proven deaf to the voice of the people. But this was also the product of the growing political maturity of the Gilets Jaunes assemblies who had gathered on the occupied roundabouts. The movement had advanced from the stage of posing a problem to that of putting forwards a solution. Here, a crucial question came into play: ultimately, who can legitimately decide? This case also reveals another characteristic of what happens when a movement ‘grows over’ beyond its initial state: it moves from its initial social focus to ‘democratic’ – that is, political – demands. But the opposite is also true. In the first instance, the finger is pointed at everything that does not work quite as it should, and at the people deemed responsible for this. The challenge to the government, for one reason or another, expands into a process that raises questions regarding society as a whole. This is crucial to

the expanding process of popular mobilisation. Tactical orientation within such a situation depends on this ‘growing over’ of the initial movement.

Pre-existing struggles

The slow stream of revolution

Some people believe in a metaphysics of revolution that consists of uncontrolled surges that then magically release the contagious influences of political activism. It is imagined that, once the trickle starts to grow into a popular tidal wave, the revolution will then follow a well-established path. But it would be better to drop this idea. What we need instead is an accurate mapping of the terrain. This is, in fact, what some observers and sociologists have offered. Writing and reporting on the actual course of revolutions, they have pinned down the concrete modus operandi of mass popular mobilisation. In this respect, it is fascinating to learn how events unfolded in the moments following the suicide of the young greengrocer in Sidi Bouzid, Tunisia, on 17 December 2010.[2] Immediately after his self-immolation, a group of people, particularly women, decided to stay behind and voice their anger. As the hours passed, more and more people kept coming along. The people standing around the body of the young street vendor, waiting for help to arrive, started to mobilise online webs of connections. Many of the people at the scene were already connected by networks. Sidi Bouzid has a strong network of political activists. Everyone knows each other, even though the town has a population some 50,000 strong. There were already active groups of people based on friendship or else on more directly political affiliations, spanning everything from trade union activists to football ultras. Of course, these groups are not active all the time, but they do form webs of friendship and identification. And

Tunisians are a highly interconnected, politicised people. Even back in 2010, a quarter of people had a Facebook account. Various protests that had taken place locally before the series of suicides had already produced mini-networks of friends, activists and other individuals. Some of these reached far and wide, depending on the individuals involved, their profession, their sporting activities and their family or tribal ties. So these people are together, as strongly as they would be in a group chat or a Facebook group. They can often easily continue their exchanges on a more personal, ongoing basis, and this creates a certain stability in their connections. When an action is triggered or starts up again – even in a different location, and even if it concerns a different issue – they immediately start talking to each other about it, just as they did the first time, in an experience which is still treasured as a fond memory.

From cause to effect

Each person lives in different worlds, with their own personal history. This often produces just as many distinct messaging loops. Today, the conditions are developing for the whole world to be integrated into one such circuit. It is worth understanding how important a development this is. First, we need to consider the reach of the available network: in the Tunisian case, one person in four. A platform was specially created for this mobilisation, called Nawaat. It aimed to help people connect, for the sake of taking action – but also to access news, despite government censorship, and to circulate information both to and from the outside world. This was the beginning of the ‘cyberactivism’ of the Tunisian revolution. In Egypt, 5 million people were connected. That is not a huge number, but it was decisive. Generally speaking, in the Arab Spring, the use of Facebook and Twitter was clearly the primary factor in connecting, amplifying and organising the movement. The same is true of movements in Europe. In France, at the height of the Gilets Jaunes movement, more than 1,500 Facebook groups were formed,

embracing more than 4 million members in total. Every week, more than 1,500 Facebook ‘events’ were organised, on the scale of a neighbourhood, a village or a town. This certainly caught the media–political bubble on the back foot.

Meta-network

This set of distinct messaging ‘loops’ can then combine into a ‘meta-network’. Each past struggle, however local or sectoral in character, will leave a lasting mark insofar as it creates a network of individuals which can be reactivated at some future point. Here we can clearly identify a chain of cause and effect. The contingent trigger generates a flow of information and gives rise to connections between people. This creates an initial network. This will then become part of a meta-network at the earliest opportunity – both a highly inclusive and an expansive factor for circulating information far and wide. This is especially true if the events unfolding concern the whole country, for instance when a previously calm society is suddenly in the grip of an insurrection. The force of the information arriving by different means – via telephone, television, radio or social networks – fuels further interconnections. The action ends up binding together the thousands of people acting in unison, as if they were a single organism. One crucial detail, in such circumstances, is that all this communication is done using the same words, thanks to the ‘transfer’ function of messaging services. This is a powerful factor for creating a homogeneous movement. In a sense, mass mobilisation today takes the form of a meta-network, in a constant back and forth between the virtual and the material levels.

Murmurations

The meta-networks that develop in citizens’ revolutions also behave rather like living things. I will give one example from when I was in Colombia.

My hammock was hanging next to a mango tree, where dozens of parakeets were chattering away, gorging themselves on its fruit. Sometimes, a sparrowhawk on the hunt would throw this flock into a panic; sometimes I would do the same myself, whenever I wanted to get some peace and quiet. In that moment, a swarm would take off from the mango tree, zigzagging madly through the air. It is worth describing just what this flight looked like. The first parakeet sounded the alarm, took off and flew at random in panic. All the others followed, screaming. The swarm zigzagged and twirled in beautiful order for several minutes before landing safely again. But for the parakeets to fly as a group they obviously have to respect ‘rules’ of movement. No bird can come within ten centimetres of another if it wants to avoid being hit. The next bird along becomes the reference point for its neighbour. They all have to fly towards a central path simply because that’s the most stable line of escape. And so it continues. Such behaviour in starlings is called ‘murmuration’. Such simple rules make it possible to predict the position of thousands of birds,[3] even in movements lasting just a few tenths of a second.[4] I saw for myself a classic example routinely cited by chaos theorists, which relates to finches, no less.[5] Just a few of these rules taken together make up a set of ‘self-organising principles’. The expression is a little pedantic, but quite effective in describing what happens in a revolutionary event. I suggest we simply call these ‘murmurations’. It determines the development of the system made up of these parakeets in flight. We should recognise what this really means, even if it defies our expectations. In other words, we need to understand why it is not the number of parakeets that determines the complexity of their grouped flight, but the combination of three or four simple rules of behaviour that each parakeet obeys so that they can all fly as a group. The murmurations allow for a kind of collective optimism. Not only does the sparrowhawk not catch the parakeets, but they get to come back to finish their dessert in the mango tree.

Mist on the window

The trigger for the revolution may be hard to predict – but it never comes from nowhere. Usually, it is bound up with a whole series of preludes: a combination of more localised previous events, which may also be very intense in their own right. In many cases, massive previous struggles have already stirred people's consciousness and built networks that connect them together, sometimes long before the contingent event that triggers the insurrectionary process. These earlier developments have already built a common culture among the people involved in the event. This advance can be maintained even after a defeat. That is why Augusto Pinochet in Chile, Jorge Videla in Argentina and so many other dictators massacred even the mid-ranking cadres of opposition organisations: because they wanted to erase this prior learning. The memory of struggles is built up spontaneously, over the course of a shared experience. It forms a cumulative culture which is itself a powerful force for bringing people together. It never takes long before this memory resurfaces. To stay with the Tunisian example, some time before the revolution that toppled Ben Ali, there had already been a movement of protests by indebted farmers who had seen their land taken from them. The fight over access to land led to a far-reaching mobilisation including forms of action such as sit-ins. We saw similar forms of action during the initial phase of popular mobilisation after the self-immolation in Sidi Bouzid. There had also been sizeable protests after the closing of a mine, and the official mishandling of the resulting unemployment. Young people had been promised new employment opportunities, which were supposed to be handed out based on competitive examinations; the contest did take place, but there were no jobs going. The young people concerned called themselves the 'Union of Unemployed Graduates', a name that was soon eagerly taken up even by Tunisians who did not have degrees. This prompted significant collective identification: indeed, this same name was also given to the young street vendor who committed suicide. Obviously,

even these references to the recent past do not tell us that these prior developments are the direct and mechanical cause of the event that triggers the wider uprising. The accumulation of prior causes spreads in a more diffuse way, like mist on a windowpane. As its built-up experience becomes denser, it condenses. Drops form. Then they come together to form trickles of water … which, as chance would have it, can soon grow into a stream.

Ecological preludes

Here, we are talking about the hinterland of struggles that come before an uprising, and how they feed into a population's cumulative political culture. But, if we want to understand this properly, we should examine not only already familiar themes, but also new fields of conflict. Often it is worth putting this question directly: 'Are we seeing something that we've not seen before?' Many factors that are clear to see today were previously hidden, either through simple ignorance, or a past lack of attention towards subjects that have now become crucial. When I think about the indifference to ecological issues over the last century, I wonder whether they were in fact so absent from the field of struggles in countries where citizens' revolutions took place. My intuition would be the following: that this type of struggle leads people to commit themselves politically in a way in which their own individual consciousness resonates with broad themes of general human interest. Environmental struggles carry a message that goes beyond what their slogans and placards literally say. They demand concern for life in the broadest sense of the term. So they always have a dimension that goes beyond individual interests alone. This is rather like the way the social struggle forces us to reflect on the economic system and the legitimacy of the decisions taken in the name of its growth. What should we conclude from all this? It is striking to note how much intense ecological struggles figure in the build-up to each insurrectionary process. I will now give a few examples of this.

Rural struggles

I was struck by how quickly the call for the fall of the Tunisian regime spread to Egypt in early 2011. It was almost instant. The slogan, spoken in French: ‘Dégage!’ – ‘Out!’ – was also directed against Egyptian president Hosni Mubarak. But this also quickly brought to mind what had already come before. The prelude to the revolution of 2011 had included hard-fought ecological struggles. Doubtless, these cannot explain the entire process, but you cannot explain it without them, either. The harshness and the sheer violence of these struggles made a major contribution to the rapid flare-up in Egypt in response to the Tunisian events. In fact, the link between town and country was an obvious factor throughout the uprising. Students in revolt returned to their villages, while young peasants went into the cities to reach the sites of conflict. Since 1997, Egypt’s land reforms have often been at the centre of violent struggles. The tripling of rents and the liberalisation of landownership have turned farmers’ lives upside down. This is not a small minority, but one-third of the country’s working population. More than 6 million small farmers have been plunged into poverty. They end up migrating to the cities, where they live as an unemployed population that continues to voice its grievances. At least three-quarters of them have had to give up the land they had rented. Over the last fifteen years, thousands of clashes have pitted tens of thousands of farmers against big landowners, both in rural battles and in the courtroom. In Egypt, at least 300 people were killed between 1998 and 2004, in addition to thousands of arrests – including of children. The social, ecological and political consequences of all this are still fresh in people’s minds. The distribution of the water needed for irrigation is also the focus of ever more conflicts, which the people involved will not soon forget. The most important was the ‘revolution of the thirsty’ in 2006, which highlighted one of the first cases of water shortages and conflict over water use – a situation which has since become increasingly common in many

other countries. Then, in 2008, rising food prices provoked unprecedented ‘bread riots’, again calling into question what interests Egyptian agriculture really serves. These struggles are all experiences of radical collective action, and they build up an impressive bedrock of political culture. The visible expression of the Egyptian uprising of 2011 was urban – but it was doubtless also a product of these rural struggles.

The fight for water

This whole process shows how rural struggles, whose slogans and social composition had at first been centred on farmers alone, can develop into something rather wider. In each case we see these struggles then move on to another stage in which both farmers and city dwellers face water shortages and conflicts over the use of this resource. I have no doubt that this is going to become one of the most crucial issues at the centre of struggles all over the world. In France, we had a foretaste of this with a conflict that erupted at the height of the mass protests against Emmanuel Macron’s pension reform. Organised by the Earth Uprisings collective, this struggle in Sainte-Soline, western France, opposed the construction of so-called mega-basins: artificial reservoirs of water which is captured and privatised to the detriment of the wider population and the local ecosystem. This combination of factors poses political problems in the most all-encompassing terms, and indeed in a socially explosive way. It is quite literally ‘radical’, in the sense of getting to the root of the general human interest. But the important thing to bear in mind is that many case studies illustrate the importance of ecological struggles as a prelude to insurrectionary episodes. In such cases, the fight over water serves like a long fuse leading up to the ultimate explosion. In Algeria, the social movements over access to drinking water in 2013 and 2017, particularly in Sétif, came well ahead of the general citizens’ mobilisation in 2019. The same can be said of Iraq, where massive demonstrations against water

shortages in 2018 led almost directly to the 2019 citizens' uprising. In Lebanon, too, water shortages have been one of the main grievances in the protests that have unfolded since 2015. This country is nicknamed the 'water tower' of the Middle East, but much of the population has no access to this same resource. In Lebanon, this widespread shortage is seen as emblematic of its state of collapse. In Latin America, the fight over water is also a common denominator in the lead-up to periods of insurrection. Bolivia began its revolutionary cycle in the early 2000s with a 'water war'. Cochabamba saw moves towards privatisation that would have ended the community management of the water supply. This immediately caused the price of water to soar – a cost that now took up 25 per cent of the population's monthly income. In Ecuador, the *indio* social movements in 2018–19 focused on the issue of access to drinking water. In 2019, a general uprising broke out which was harshly repressed. More emblematic still, Chile is one of the most water-stressed countries in the world. The uprising broke out at a moment when Chile had been experiencing a decade-long drought. Even before the events of 2019, many rural areas in Chile had been caught up in social conflicts over the use of water, which had been fully privatised. Thousands of small farmers had lost their livestock and their crops due to government-imposed water restrictions. But a handful of big farmers were able to continue intensive production of avocados for export, which drank up vast amounts of water. The lack of water is something that makes people radical – everywhere, and all the time.

Suicide: the hidden, individual face of radical protest

When we study the prehistory of a revolution, it is worth checking whether a surprising fact learned about in this or that case is not being overlooked elsewhere: a kind of hidden factor. It is not that I had been unaware of the method of self-immolation that was used in Sidi Bouzid. I had already seen the suicides of monks protesting the US presence in Vietnam, and that of

Jan Palach opposing the Soviet invasion of Czechoslovakia in 1968. Mohamed Bouazizi's act in Tunisia was more individual in motivation, and for that all the more spectacular. I took an interest in his action as a starting point for the Tunisian events. Suicide is a glaring sign that a person has run into an impasse in their own life. But, for a political observer in the position that I am in, it would be a mistake to see this as a purely individual issue (however many factors are involved), even if it is obviously partially a personal matter. This act should also be read as a social and political signal. So I set out to see whether this form of action also existed elsewhere. In fact, it exists almost everywhere, and even in my own country. In 2019, I became aware of this problem, and I wrote about it on my blog. But this didn't seem to capture the attention of anyone in the political arena, so I moved on to other matters. But I am convinced that, today, suicides play an important role in the ripening of the general conditions for a revolution. It is quite clear that politics has proven unable to change people's lives, except for the worse. It is easy to see how official silence and denial trap people in a dead end of suffering. But this (ultimately fatal) cry for a political response goes unheard. Suicide is now a well-established political fact. Nobody likes the idea. Because when someone refuses to go on living, they are rejecting life as it is – and concluding that there is no possibility of improving it. If someone sees their present and future closing in on them, they may find it easier to shut off the lights. Still, suicides of this type often do leave behind a political message, which cannot be ignored. The dominant ideology makes matters worse. To say that each person is solely responsible for their difficulties is to leave them alone in coping with everything they face.

The wave of sociopolitical suicides

There is indeed a wave of 'sociopolitical' suicides in France. This meets with sheer indifference, but it is a significant fact of our time. It is the

backdrop to existential revolts like the Gilets Jaunes or the strikes against the rise in the retirement age. Moreover, it can be observed in many different occupations, in direct connection to the living and working conditions of the people concerned. In September 2019, Christine Renon, a nursery school headmistress in Pantin on the outskirts of Paris, took her own life, leaving a clear political message about the role her working conditions had played in sapping all her energies. The message she left gave her death a political meaning. Her final words were her job title, with which she signed her letter: ‘exhausted headmistress’. There are not statistics for every particular occupation. But when they do exist, they are reason to shudder. Female nurses in America commit suicide at nearly twice the rate of the wider female population.[6] About 184 law enforcement officers die by suicide each year.[7] The suicide rate among agricultural workers in 17 states is five times higher than in the general population.[8] The problem is now all around us. That this scenario keeps being repeated ought to be seen as a serious warning about the social tension that the population feels trapped in. On 10 November 2019, a student in Lyon attempted to self-immolate. He pointed the finger at the politicians responsible for his situation. One of Macron’s ministers held forth on the subject in the National Assembly: ‘Ending one’s life is never a political act’, he claimed. His comment combined ignorance and stupidity, in order to dismiss a reality that those responsible surely struggle to explain.

A last barometer

Researchers who have studied these public expressions of despair know that there is also a mimetic effect at work. But this creates neither the situation nor the decision itself. In Lebanon before the insurrectionary crisis of 2019, the number of suicides reached a record high.[9] People with no prospects opted for the most irreparable individual demonstration of their despair: public suicide. There was the same tension in Chile in the period of the

COVID-19 crisis and the revolutionary uprising. The number of suicides soared from three a month to three a day.[10] In each instance, observers, NGOs and the media point to social causes as the ultimate factor in condensing personal frustrations. This ‘social’ suicide is thus concentrated in the parts of society that have reached the most violent dead ends. That means people at the bottom of the income scale as well as the declining middle classes, when their lives reach breaking point. In Lebanon in February 2019, Georges Zreik killed himself because he could not afford to keep paying his daughter’s school fees. This form of action has become commonplace in recent years, often outside Beirut. This quite exceptional decision points to a deep rupture in society. These waves of social suicides are a constant warning sign. In India, suicides were the most telling barometer of small farmers’ despair: in 2019, more than 10,000 of them committed suicide. In total, almost 300,000 have committed suicide since the year 2000.[11] In 2019, on the eve of the general uprising, this phenomenon had reached a peak. We should see these social suicides for their full importance, not just as isolated episodes. When a mass uprising does come, it is nothing but a collective attempt to escape many individual dead ends.

11

The Revolution’s New Clothes

The spectacle of revolution

Like a fish in water

In the last chapter, I analysed the outbreak of citizens’ revolutions using a purely descriptive approach. I would like to continue in this manner, in order to more specifically understand the content and the characteristic stages of this new type of revolutionary process. Doing this starting from the first hours of the Gilets Jaunes movement allowed us to see the considerable similarities even between processes scattered across the different continents. At least, this is what we did wherever it was possible to gather direct testimonies or press reports that paid due attention to these movement’s concrete development. First of all, we need to free our perspective from the clichéd imagery of popular revolutions. No, they are not simply about the ‘great day’ when everything changes. Violence is not emblematic of revolution, either, unless that means the police violence deployed by the government of the day. We need to look further, and wider. So I have drawn up a list of distinctive characteristics of revolution today. If

you want to be like a fish in water, you have to know what river you are swimming in.

Us against them

On-the-ground observation of the form that events take provides valuable knowledge. The similarities across different parts of the world can point to invariant laws of organisation. After the ‘chance event’ that sets things in motion, the movement will take root around some initial demand. Its dynamism stems from that. At the start of a revolutionary process, the action is not unleashed in the name of some overall project. It almost always begins from the need to resolve some specific, sometimes quite limited, issue. Throughout the process, this will remain its main way of keeping up momentum, and its greatest source of cohesion. The masses in movement do not act for ideological reasons or in the name of a party. Sometimes, the movement’s main spokespersons have no known political inclination, and do not go on to express one either. We saw this in the case of the Gilets Jaunes movement. This would decide the movement’s forms of expression in its first phase, which were so crucial for its subsequent cohesion. The movement’s activists were careful to avoid any image of party political affiliation. The only dividing line they wanted to emphasise was the one between ‘them’ and ‘us’.

‘They’ can mean anyone. But most often it means the head of government and the supposedly corrupt people around him. Yet although the movement often calls for the fall of the government or the immediate resignation of ministers, it often presents itself as ‘apolitical’. This is paradoxical, and yet it is not so strange. It is a spontaneous strategic line. It seeks to achieve the broadest possible unity of the movement’s social base. Emphasising its concrete concern for action also corresponds to this aim, especially when the movement needs to establish its presence in the eyes of society – primarily via the media.

Citizens’ assemblies

Sans-culottes, soviets, roundabouts

Here it is worth turning to the most significant aspect of a citizens’ revolution unfolding: the emergence of citizens’ assemblies. This term refers to spontaneous gatherings, whose number of participants will often vary. In the Gilets Jaunes movement in France, the occupied roundabouts operated as such an assembly, and were often referred to in this way. Their discussions and debates continued throughout the days and weeks, and the events, of the Gilets Jaunes movement. This offers an obvious basis for comparison with the general assemblies that take form during strikes by workers. There is the same desire to transcend individual allegiances, the same concern to observe egalitarian rules of conduct, and the same general euphoria after meetings are held and decisions are made. This is no small issue. Historically, many commentators have noted how the most important thing was not only the eventual outcome of a struggle but also the growing sense of power and common identification among the people involved. In the protests against the rise in the pension age, such assemblies were called *interprofessionnelles,* referring to how they crossed different occupations and trade unions. The occupied roundabouts and the meetings preparing actions are the constitutive organs of this era of struggle. They work like assemblies, in a sense realising the utopia of a society self-managed by its members. These citizens’ assemblies thus have a family tie with the Parisian sans-culottes’ *sections* in 1792; the Russian workers’ or soldiers’ soviets; and the Tunisian, Sudanese and Greek neighbourhood committees of our own century. Indeed, this is a kinship they have with revolutions in general, when we look at them more closely.

Dual power

In many towns and villages, the citizens' assembly on the Gilet Jaunes's roundabouts behaved like a countersociety. They even had such things as sleeping areas and spaces for shared meals. On their different scales, all these features served as collective points of identification. For the people present did not all come from the same place. In fact, they sometimes moved from one roundabout to another, depending on their mood and the nature of the discussions. This helps us to see the real importance, and the real meaning, of the citizens' assembly. Far from being simply a meeting held by citizens, it is a body that almost immediately begins to function as a counterpower – and to see itself as such. Blocking this or that is a decision. The law matters little here. What is permitted or forbidden is no longer a consideration. The decision is made; it is applied – and that's that. In the mass of information that came back to me in November and December 2018, I noted numerous attempts to coordinate the roundabout assemblies in such and such locality. Sometimes they even sought meetings of 'delegates from the citizens' assemblies'. This model existed in the French Revolution, and culminated on 14 July 1790 in the Fête de la Fédération des assemblées locales.

A countersociety

Such a development has been seen just about everywhere. In Sudan, for example, resistance committees were an essential part of the citizens' revolution. Initially, these were groups of citizens working in their neighbourhoods to put in place the basic services that they otherwise lacked (electricity, water, hospital and school conditions, and so on). *They* came from all classes and ages, but they were mostly young people. They soon moved to rebuild the organisation from the bottom up, starting in local neighbourhoods. They had a system of delegates coordinated by district, then at city level, right up to the national level. The whole process worked on the basis of anonymity: the members of a committee would not know the

identity of the delegates at the next level up. In April 2019, when the regime fell, these committees organised events in support of the revolution and were the coordinating bodies for the major demonstrations. There was a similar atmosphere in Sri Lanka in 2022, as here, too, the fight against authoritarian rule demanded a measure of clandestine organising. The first demonstrations began with candlelit vigils attended by a small group – just six people. These vigils spread throughout the country, with more and more people then coming to attend the demonstrations. Organising in small groups meant that the demonstrations could grow rapidly, without any organisational signal and without any party issuing the call to action. In Tunisia, in 2010–11, these committees were also set up at the neighbourhood level in lower-income neighbourhoods. They were often organised by local trade unionists. Usually, their primary task was to guarantee security against real or suspected looters. In Greece in 2011, as police violence exerted its grip over the central square in Athens, the demonstrations instead retreated to the other districts where people lived. There, street assemblies were held to discuss actions and issues of common interest to neighbourhood life. In Chile in 2019, neighbourhood assemblies were also the movement's dominant force. Several dozen neighbours would meet in public spaces, such as small neighbourhood squares. Encouraging a process of citizen participation also became a common focus among activists. Everywhere they went, they proposed setting up such committees, and action networks were created. Everything was collectively taken in hand, from sourcing writing materials to designating spokespeople, amassing food and supplying water. At the end of the process, a sort of list of grievances – what had in the French Revolution been called a *cahier de doléances* – was drawn up, compiling locals' various demands. These self-proclaimed citizens' assemblies developed in a large number of neighbourhoods and towns across the country. They met at weekends to enable as many people as possible to take part.

Visibility

Plain as the nose on your face

Looking at different citizens' revolutions, I started to see another essential trait that they have in common – one that allows them to identify themselves. Visibility is a movement's first concern, to decide how it is identified both by those directly involved, and by society as a whole. This doubtless reflects the ubiquitous culture of images in the twenty-first century. This is the work of television channels the world over, which live off images. They are more readily broadcast if they cost nothing to produce, but also if they simply 'speak for themselves'. Here, the image takes on all the force of the 'obvious' and has the corroboration effect of having been 'seen on TV'. In this, we can also find the trace of an older understanding which comes from social movements' wider practices. The LGBTI movement has always sought to make visible 'those whom others didn't want to see'. This led to the use of symbols like the rainbow flag, created in 1978, whose colours represent the diversity of sexual orientations and genders. In another example, ACT UP (AIDS Coalition to Unleash Power) adopted the pink triangle as their symbol, harking back to the murderous cruelty inflicted against homosexuals in concentration camps during the Second World War. The same goes for the wearing of the red triangle by anti-fascists. Such ritual references to the past are a common feature of social movements. We also see this in the Black Lives Matter movement. After the murder of George Floyd in May 2020, it adopted the symbol of 'taking the knee', a gesture already used by the American football player Colin Kaepernick in 2016. He had himself taken this from Martin Luther King. With the opening act of the Tunisian revolution, the reflex was to share videos on social media in order to attract international attention. The news spread thanks to the television news channels France 24 and Al Jazeera, which picked up footage posted on Facebook of people next to the

man who had self-immolated. People shared the images on social media, hoping to pressure both Tunisian television stations and ones in neighbouring countries to cover the story – and this turned out to be a complete success. The habit of collecting and broadcasting as much footage as possible in this manner rapidly took hold. This spontaneous practice has now spread around the world. In the age of images, you have to be able to produce them and spread their message, in order to amplify the action that has got underway.

Yellow vests

Visibility is a key factor in the battle. Visibility is something you have to achieve at all costs, in order to make it onto the national and global news agenda. Sometimes, the movement will achieve this through its name alone, as in the case of Nuit debout, the Indignados, and Occupy Wall Street. It did not take long before mentioning one of these names meant referring to ‘a whole world of protests’. The highest achiever in this regard, in France, was doubtless the Gilets Jaunes movement. Indeed, in their daily use, the ‘yellow vests’ are designed to be visible. Our Highway Code requires that one is kept in every vehicle; it is meant to be visible even in the dark or in fog, in the event of a problem on the roads. The visual effect of a swarm of this fluorescent item makes these gatherings impossible to ignore. Its use in day-to-day life is the same as its political use: making the invisible visible. A distinctive marker worn at the occupied roundabouts or on demonstrations, or placed on the dashboard of your car as a show of support, it has become the name for all those involved in the movement. They *are* the ‘yellow vests’. Wearing them is a way of being seen, recognised and identified with a struggle. Yellow vests can now be spotted in every popular uprising all over the world, as if to appropriate the symbolic power of the movement in France.

Popular culture

Indeed, another characteristic of each of these movements is the way they express their connection with similar events worldwide. This allows them to vaunt a kind of universal legitimacy. *Gilets jaunes* can be found worn by protesters everywhere. But, just as significantly, there are emblems of universal protest culture like the Dalí masks in the style of *Money Heist.* The reference to the Netflix series is telling. The show's first season is emblematic of a non-violent, anti-capitalist political message – one that fits with the aspirations of the kind of middle class that subscribes to Netflix. It uses this as a well-meaning political reference in keeping with its own way of being. The mask symbolises non-conformism, but above all rebellion against the financial and banking system. It too would travel around the world, itself sending a message wherever it is worn. Another such pop-culture reference is the Joker; protesters put on the make-up of a clown who fears neither God nor man. It has been reported in Hong Kong, Beirut and elsewhere.

Have mask, will travel

In this way, demonstrators refer to the common pop culture spread through cinema and television series. It is no longer necessary to refer to any doctrine, any political party or any controversial past. The Anonymous mask worn by Occupy Wall Street activists also comes from film and comic book culture. The white mask with its ironic smile is inspired by a famous English conspirator from the seventeenth century, Guy Fawkes, and was popularised by the film *V for Vendetta.* This mask is an identifier worn just about everywhere around the world, again on a purely personal basis. The general rule seems to be the same in each case: identify yourself without putting yourself forwards; stand out without advertising your own identity. The era of faces and leaders seems to have given way to a different way of

formulating the cause – one that relies on a widely known symbol whose meaning remains open and broadly defined, just like the audience for a globally acclaimed film. Another example of this came during the 2020 uprisings in Thailand, when Thais raised their hands in the three-finger symbol from the *Hunger Games* movies. It had earlier been used by a student protesting the 2014 *coup d'état*, and Thai authorities then banned this gesture. After that, it was widely adopted as a symbol of protest against the junta, denouncing the dictatorship. In the films, it is the symbol of the revolt against wealthy oppressors living in a capital protected by an army. The films in the *Hunger Games* franchise have been seen by hundreds of millions of people around the world. Young people in Myanmar (Burma) have also adopted this symbol in their calls for democracy, in the wake of the military coup of 5 May 2021.

Haro!

This section on visibility could not fail to mention another key identifier – this time, one that you hear. The citizens' revolution is also a sound, music, sometimes a song. And this is an old story! In the Middle Ages, for the vast majority of the population, all information had to be communicated orally. The town crier played a key role in spreading the word about decisions taken and rules to be followed. But there was a great distrust of spontaneous shouting and fear over its effects: panic, revolt and false alarm in times of war. An outbreak of shouting was the chance development that the authorities feared. Étienne Marcel's uprising in Paris in the fourteenth century began with a greengrocer crying out in protest when tax collectors came to demand that he pay excessive fees. Shouting was codified and often prohibited in certain cases. After the young greengrocer's self-immolation in Tunisia, people got together and cries of pain and indignation spread, raising the alarm and stirring sympathetic reactions. Women gave these cries their special meaning: a natural anger and a grief that no one has

any right to challenge. In Brazil, every year since 1995, a ‘cry of the excluded’ has been heard in several cities, exposing the country’s wounds each 7 September, Brazilian Independence Day. The cry of the excluded follows on from the cry for independence. It is a cry for bread, work, land, justice, dignity and sovereignty.

Banging saucepans

Today, all sorts of symbols are making a sound. In France, when police pound their batons on their shields to create an intimidating noise as they are about to charge the crowd, they meet with a hail of whistles and concerts of pots and pans. It was under the July Monarchy in 1830 that the saucepans first left the stovetops to take to the streets in political battle. They were used again in the following century, in the opposition to Augusto Pinochet’s military regime in Chile. The slogan that went with them referred to the dictator’s wife by name: ‘Lucia, Lucia! The pots are empty.’ In the movement against the rise in France’s pension age, pots and pans immediately became a mass force. No ministerial visit was spared this racket. A competition between towns was organised on social media. A giant *casserolade* was organised in front of every town hall in France, to celebrate the first anniversary of Macron’s re-election. His first official speech following the promulgation of the pension reform was immediately greeted by pots and pans outside town halls and at the windows. Local authorities even issued absurd decrees to try to ban them.

More often than not, the song sung or the slogan chanted serves a unifying, identifying function – a call for people to rally together. They are often borrowed from or inspired by popular songs, such as chants from the terraces of the football stadium. The Gilets Jaunes and then the people protesting the rise in the pension age sang ‘Even if Macron doesn’t like it, we are here’. This draws on a chant from the supporters of a French football club rooted in working-class culture: ‘We are here! We are here! Even if

you don’t deserve it, we are here! For the love of the shirt you wear on your back, we are here!’ A song by the popular singer HK, ‘We won’t back down’, is also often heard at various demonstrations. Sometimes a song is taken up as a tool in the fight. The video *Basique* by the rapper Orelsan, for example, has been ‘covered’ by various people on protests: by striking carers or lawyers, and by environmentalists. What gets shouted out is again something simple, like a shared colour. It declares a collective ‘I’, a clear common identity in a moment of confusion.

Urban life

The city, a revolutionary actor

The omnipresence of the city and its impact on each of our personalities make it the central focus of the citizens’ revolution. But it is not a mere backdrop to events. The city itself is a subject for political action. The city brings all the neighbourhoods together in a single living space, and at a certain moment it brings all the people together in the street. The street is the highest stage of popular visibility. Faced with mobilisations, the media and government officials often refer to the people in action as ‘the street’. Governments insist that ‘the street does not make the law’, and after each demonstration the media class pronounces that ‘street discontent is waning’. Finally, the urban space itself sends a message. We have said that the city generates political behaviour: processions, barricades, roundabout occupations and neighbourhood assemblies – you name it. The first barricades are mentioned in the *Commentaires* de Blaise de Monluc,[1] the warlord who commanded the royal troops against the Huguenots in Guyenne in the 1570s. The word is derived from *barrique* (‘barrel’) – literally meaning ‘barrage made of barrels’. The barricade was used to

block the street network.[2] The street as a political battlefield is, as an arena of action, as old as the street itself. But the condition for this is that the street does indeed exist. The city creates a form of political expression. Paris saw its first street demonstration around 380 AD when Gallic legionaries refused to set off for the East.[3] The barricade is the product of urban space. It politicises space by drawing a line in the political order: you're on one side or the other. There is 'them' and 'us'.

Access denied

The spirit of the barricade is obviously the blocked access road, the space that has become inaccessible. In the world of networks, this is a powerful symbol. At the junction of visibility, centrality and mobility for all, is the either intermittent or permanent occupation of places central to the metropolitan space. In the Gilets Jaunes movement, the roundabout occupations reinvented the principle of the barricade as a means of taking control of space by cutting off traffic. We have moved from an emblematic action to a message of seizing power. The roundabout occupations thus achieved a result comparable to that of the factory occupations in general strikes historically. In this case, the control imposed on networks has a far-reaching significance. If we accept that the barricade is, above all, the means of blocking a circuit, then we can expect to find modern equivalents too. The blockade will no longer focus on the streets per se, but on the flows that run through various networks. The targets of choice are the railways, motorway traffic, energy and online networks. So today's insurgencies are rediscovering a way of acting by stifling the powerful – the same thing that made the barricade so effective. Is the blocking of flows, networks and the chains of logistics not a contemporary barricade against capitalism? This type of strategy also emerged in France in 2023, in the historic movement against the rise in the retirement age. This was directly concerted by unions at the sectoral level, in the absence of coordination by

the union confederations. The idea was to concentrate strike action in sectors capable of a general blocking force. In particular the success of funds based on solidarity donations shows the breadth of this desire to support essential strikers in essential sectors. During the movement against the pension reform, the strikers included railway workers, dockers, oil refinery workers, electricity and gas workers, air traffic controllers and refuse collectors. These strikes did not primarily aim to hit the shareholders of any particular company, but rather to affect the interests of all shareholders in the French productive fabric, by stopping things moving. Another factor, here, was the on-the-ground help in blockading a particular site together with the strikers, or in helping them resist authoritarian measures to force them back to work. We saw impressive examples of this at the waste-lorry depots in the Paris region, at the Gonfreville refinery in Normandy and at the Fos-sur-Mer depot in the Bouches-du-Rhône *département.* There were also many non-strike actions to hold up the flow of goods. In Paris, there were several attempts, some successful, to block the *péripherique* dual carriageway around the city. In the cities of Nantes and Rennes, the ring road was successfully blocked on several occasions, particularly during the cross-union days of action. In the same spirit, the Jeunes insoumis in Marseille blocked the Terrasses du port shopping centre in the city centre.

Strongholds in the squares

So the occupation of public space has become a hallmark of the popular mobilisation typical of citizens' revolutions. In 2011, Egyptians camped out in Cairo's Tahrir Square. A tide of human beings had already taken over Bardo Square in Tunis. At the same time, on the other side of the Mediterranean, thousands of Indignados were camped out at Madrid's Puerta del Sol. In Paris, Nuit debout occupied the Place de la République, while their Greek counterparts occupied the square in front of the

parliament. In the United States, there was Zuccotti Park by Wall Street. In 2013, Istanbul's central Taksim Square and its park were the epicentre of the popular mobilisation against Erdogan's regime in Turkey. In 2022, the revolution in Sri Lanka also occupied a park in the centre of the capital, Colombo. In 2018, the Gilets Jaunes fought every Saturday to reach the Champs-Élysées and the Arc de Triomphe – a site with truly global visibility. A year later, Chileans staged the largest popular gathering in the country's history in Santiago, in Plaza Baquedano, renamed Plaza Dignidad for the occasion. In Baghdad, the square opposite the 'green zone', where the US embassy and the occupation forces' institutions were holed up, was taken over by the revolutionaries. It was a permanent forum. At regular intervals, the insurgents tried to enter the 'green zone'. They were shot at with live ammunition. This event was marked by several hundred deaths before the crowd was dispersed. In Sudan, a self-organised resistance camp was set up opposite the Ministry of Defence. Security checkpoints were set up by the insurgents to prevent anyone with weapons from entering, while books banned by the dictatorship were brought in. There was a flood of discussions. Networks were created that would never break up, even after a further military coup. In each case, the city was central, and the revolutionaries wanted to take it over. The city centre in Europe, and in many of the world's capitals, is in a sense the city itself. It encapsulates its whole image. We can then say that the city is embodied by those who have occupied it. This is a form of seizing power. Of course, the essential function of this occupation is to make visible both the actors involved and their actions. But it also says more than that. It expresses the symbiosis between the people and the place where they live. And by the same token, the people shows its potential power.

Urban revolt

If the city creates its own order and forms of political intervention, it also creates its own kind of ‘disorders’. The city’s outcasts became the ‘dangerous classes’ of the age. The ruling class of every era will always identify this kind of population as suspicious: and it finds it from among the people it rules over. It is frightened by these populations because they have the force of numbers and will sometimes show the strength of their opposition to the unjust order they suffer. When they rebel, an almost limitless violence is inflicted on them. Thousands of slaves who had joined Spartacus’ revolt were crucified along the Appian Way from Rome to Capua. In France, in the fourteenth century, after the peasants led an emblematic *jacquerie* lasting a month and a half, the lords and the bourgeois were still hanging people in the villages a year later. Then there were the workers, who, right from their first appearance as a distinct social class, were subjected to massacres that have remained infamous in every country. We could cite Lyon and Fourmies in France, or the massacres in Milan, Manchester, Ghent and Liège. With cannons, guns and horses, the slaughter was as industrial as the era itself.

These days, the ‘dangerous class’ feared by the powerful is the urban population in marginalised neighbourhoods. Their geographical marginalisation is an unambiguous social signal. In ‘normal’ times, specialised police units constantly provoke them in order to train them in submission. This negative contact is a shared experience and shapes a common culture of humiliation. Police abuses forever go unpunished, and official lies cover up for them – repeated time and again, until they are disproved by images that say otherwise. All this sends the victims on the receiving end the message that they have to submit without complaint. Constant spot checks, police custody and sometimes even murder follow one another, with the barely concealed approval of the police hierarchy and leading politicians. These latter use all this activity and the reactions it

provokes as their electoral stock-in-trade, fanning the flames of hatred and racism.

In the United States, as in France, the same model of abandonment produces the same form of insurrection – though it also shocks the rest of society. Right from the start, the words used are telling labels. These revolts are called ‘riots’, and if the word ‘revolt’ denounces the context from which it stemmed, the word ‘riot’ refers to indiscriminate, pointless anger. Revolts are rational, whereas riots are an outpouring of passion. In such moments, from one day to the next, from one night to the next, the forms of expression are highly symptomatic. The areas concerned are those where there is most often no social mediation of any kind: life is work, sleep, police. All conflict then becomes head-on. The touchpaper is invariably lit as a result of some particularly appalling police violence, which itself comes after a long series of abuses of power and verbal outrages. The social media where videos and meet-up points are shared speed up the identification process and the general conflagration.

A breeding ground for conflict

The social condition is expressed in forms shaped by the urban geography. The sense of abandonment highlighted in interviews with local residents always points to the absence of the collective networks that serve the general interest: transport, shops and so on. In the revolt, the chosen targets are telling symbols. When town halls and police stations are set on fire, how could we fail to recognise the anger against the state? How can we fail to see social injustice when schools and employment offices are ransacked? The high cost of living, when supermarket food shelves are emptied? Or yawning inequality, when luxury shops are looted?

In each case, the participants’ stated purpose is to take back the territory where they live. If the authorities and media pundits speak a language of conquest, the insurgents respond with their own discourse, identifying their

battles against an occupying force. In France, the idea of getting the army to intervene is regularly raised as a threat, like in a war where control of the territory is at stake. Incidentally, the legal framework used – the ‘state of emergency’ – itself stems from periods of colonial warfare against occupied populations. The whole vocabulary itself becomes a manifesto.

The return to ‘calm’, to ‘normality’, cannot be understood in the same way in just any neighbourhood. For some, it means a return to their usual unflustered existence; for others, it is a constant, violent injustice. For some, the term ‘forces of law and order’ refers to a reassuring authority devoted to its mission; for others, this is a boorish, hostile and dangerous body. For some, ‘order’ is a state of calm; for others it is social violence. The addresses from which we speak and hear work like dictionaries unto themselves.

All this is to say that the urban landscape is not just the setting for the conflict, but the breeding ground that produces and shapes it. Naturally, all this is symbolic. The territories in question are not about to secede, and the authorities are not going to occupy them. Ultimately, everyone returns to the previous situation – the same one that provoked the revolt and will inevitably provoke the next one. Still, since the Gilets Jaunes movement in France, new forms of behaviour can also be observed. For example, people head out to demonstrate in upmarket neighbourhoods rather than damaging their own one. This is recognition of a class struggle that is already part of the urban social geography. *Jacqueries* used to besiege castles and towns. Workers’ revolts went to the managers’ offices. Physical movements always have a social and political meaning. They confront the places where an unjust authority is expressed. Hence, the shock of those observers who do not understand the mixed feelings when these revolts are viewed from the balcony of the oppressed.

The legitimate and the consensual

A partial blindness

One October day, I was on the set of a pay-TV show, where we were supposed to talk about the citizens' revolutions happening at the time. I was then working on a 'phenomenology' of citizen revolutions, trying to nail down the traits they have in common. But one of my observations upset the host: 'You say that national flags are ubiquitous. But to be honest,' he said, 'I wonder where they are.' I stopped for a moment and looked behind him. There was a wall of screens. They were showing images illustrating our debate. There was a forest of national flags: as it happened, the Lebanese flag! In each case, there were crowds of demonstrators waving their country's flag. It was there, right in front of our eyes. But the journalist hosting the debate could not see it. Each of the shots showed a mass of Chilean flags, Lebanese flags, Iraqi flags and Algerian flags. At least he had seen the tricolour flags on the Champs-Élysées during the Gilets Jaunes movement. My guess is that he did not want to see them. He undoubtedly had some sympathy for the movements in Chile and Lebanon, but he could not understand how important national flags are. For him, a well-educated middle-class Frenchman, the national flag is a sign of chauvinism. But that is not at all the case in citizens' revolutions.

We the people

When people pick up the national flag and make it their own, they are saying, 'This country belongs to us.' In other words, 'We are the sovereign people.' This expresses a popular political legitimacy. Of course, it is also a way to denounce the privileges of the powerful, of governments, of the oligarchy. But the first impulse is to seek the legitimacy of their demands. In Lebanon, this symbol carries extra weight in a society fragmented by

religious sectarianism. Faced with all this, the national flag is a reminder of the people's fundamental unity, united by their common demands. The connection between common demands and the people's more properly national mould was brilliantly illustrated by Jean Jaurès in a 1911 speech in Argentina. Speaking to workers of various backgrounds – French, Italian, Spanish – he urged them to follow a strategic approach: 'Don't club together by nation of origin! Unite around your common demands – and from this union, the Argentine nation will emerge.'[4] The pressing need to overcome division is the reason why waving the national flag is so important in the opening stages of citizens' revolutions. It also expresses a feeling of betrayal by the political elites. There was the same mood in Ecuador in the late 1990s when President Abdalá Bucaram questioned protesters' real identity. He denounced them as 'unknown people, without identity cards, immigrants from neighbouring countries'. Everyone then made a point of wearing a sign around their neck: 'I am unknown so-and-so,' followed by their identity card number. The chauvinist is Bucaram. The activists' retort said something quite different: 'We are the masters here, not you, Bucaram!'

The people and its unanimity

'The people'. This word is not a label that I just happened to apply. It refers to a reality that is still in search of its own identity. The word is drowned in attempts to wield it for ethnic and chauvinist ends, and sometimes even lumped together with the ravings of racists. But it most certainly cannot be abandoned. The people itself knows this all too well. The national flag is a direct assertion of the claim to political sovereignty. Recognising this allows us to see clearly how a symbolic hegemony already understood by all is used to build a concrete political hegemony. There is every reason to believe that no majority for revolutionary objectives can ever be built, except through this method of working towards consensus at every stage of

mass popular action. This is a fully inclusive method. It requires us to act in a certain way, refusing the political sectarian's tactics of constant splits and the formation of majorities that bypass the rest of the opinions expressed. Let us look at how the people in action armours itself with protections against this type of harmful practice. In France, on the roundabouts occupied by the Gilets Jaunes, the 'topics that people fall out over' were put to one side. The main aim was to avoid divisions within the movement. The issue of immigration, in particular, was seen as a divisive factor. Raising the subject, one way or the other, was often forbidden outright. To preserve a certain consensus among the demonstrators, the political conversation was limited to social, democratic or ecological questions. This selection of issues is itself a whole manifesto.

The revolutionary method of seeking consensus

These are all signs of a social reality searching for its own identity. It refuses to identify with anything that might cause division in its ranks. Many see this as a weakness, believing that these movements are forever condemned to political impotence. Indeed, it would be impossible to have representatives who truly speak on behalf of everyone. The slightest attempt to do so meets with sharp pushback. Even the administrators and moderators of Facebook groups are often given short shrift, sometimes quite unfairly. But I do not see this self-restraint in the name of consensus as a drawback. Instead, I see it as a source of strength, a force that can drive a movement forwards. An assembly on an occupied roundabout is surely a fragile collective, ill-equipped to survive the kind of pitched battles in which party congresses, or the student general assemblies of days gone by, bitterly argue over resolutions. The participants have a keen sense of that: they push for consensus whenever tensions arise. This is indeed an implicit strategy that seeks to unite the people. And this carries real political value. It is a way to mould a political actor that stands apart from the rest. It means

allowing coexistence between its different components. It is a way of prioritising popular unity, recognising it as the most effective form of action.

Women in revolution

The Marianne of Lebanon

For anyone paying attention, it is obvious. Women are a massive force in citizens' revolutions. Yet the media's entrenched patriarchy does a lot to keep it under wraps. Even so, in Sudan the image of Alaa Salah, a twenty-two-year-old architecture student, on the roof of a car, haranguing her fellow revolutionaries, went viral on social media. Herself the emblem of the revolution, dubbed 'Kandaka' ('Nubian queen'), Alaa wore the symbolic white 'tobe' which women had also dressed in during the citizens' revolutions in that country in 1964 and 1985. The demands of these revolutions also centred on women's rights and their place in society. The same was true in Lebanon, where a viral video showed a young woman standing her ground against a policeman. She became a symbol of the struggle within a matter of hours, earning the nickname the 'Marianne of Lebanon'. But if women's role in these revolutions has gained symbolic weight, this is also a sign of something deeper. The prominent involvement of women in the revolutionary struggle reflects the current state of social relations.

On the front line

With women's involvement, all the typically gendered activities change register. During the protests in Beirut, for example, women organised a spontaneous security presence in order to keep the demonstrators safe. This

was quite a shock for the violent sexists who intended to attack them. In Iraq, women made their presence known right at the heart of the confrontation, on the bridge facing the ‘green zone’ that had been closed off by the US occupiers and the Iraqi authorities. In Tunisia, women were involved at every stage of the revolution, and took part in the clashes. Their involvement also put up a real barrier against the religious fanatics who wanted to exclude them from the political scene. During the Gilets Jaunes movement in France, women were an especially noticeable force at the roundabouts and in the demonstrations. Of course, this list would not be complete without mentioning the case of Iran, where women both triggered the revolution against the regime and are on the front line of its battles. Their presence is a real challenge for the Iranian authorities, who fear the contagious force of women taking to the streets. The authorities rapidly moved to isolate and attack women in order to re-establish the climate of fear on which their rule relies. Women became prime targets. During the Chilean citizens’ revolution, at least thirty women demonstrators were sexually assaulted or raped during arbitrary arrests and detentions.[5] Amnesty International reported how the police used sexual violence on a massive scale to break up the national strike in Colombia in 2021.[6] In France, in 2023, four female students were sexually assaulted by police officers while demonstrating against the rise in the retirement age.[7] That is not even counting the many scenes of humiliation, degrading treatment and insults. In Iran, the ‘morality police’ subject women and girls to arbitrary arrest and detention, torture and other murderous treatment.

At the forefront of history

The history of revolutions also shows that it is often women who launch the uprising. That was what happened in Russia in 1917. In Petrograd, the women workers at the Putilov steel mill took action to mark International Women’s Day. At the time, they represented over 40 per cent of the

industrial workforce. On 23 February, against the directives issued from all quarters, the women abandoned their workstations and gathered in the central square. They demanded bread, an end to the war and the proclamation of the republic. A massive general strike broke out. We can also look at the women of Paris in 1789. Having started out on a bread march, they imposed a radical turn on the revolution, forcing the royal family to return to the capital. This happened on 5 October 1789. They set off from the Hôtel de Ville and marched to Versailles. They marched ahead of the men. The women's role was put front and centre. It also had a feminist content because, for these women, their social condition was linked to their gender. As they saw things, this set them in a different relation to authority than the men. They forced the king to sign the abolition of the feudal system, already decided by the National Constituent Assembly on the night of 4 August, as well as the Declaration of the Rights of Man and of the Citizen. These were the two key pillars of the French Revolution and then of the republican order. One of these women was Pauline Léon. She created the all-women Society of Revolutionary and Republican Women. She demanded the right to form women's militias and the right to vote. She called on all women to wear the tricolour cockade to distinguish themselves from the enemies of the people. The same thing happened in 1871 during the Paris Commune. Louise Michel and the women of her *arrondissement* went up to Montmartre. They came to take over the cannons that had been funded through popular subscriptions. These were not bourgeois women who had just come out of their drawing rooms. They were women of the people – the people who lived off their work. They had been pushed to the limit of survival, and did not want to endure Prussian occupation.

Reasons for anger

But it is not enough just to note that women have been a massive force in citizens' revolutions. It also needs explaining. I am not at all convinced that there is some particular feminine 'nature' that holds for all places and all eras. Where would we even begin to look for such a thing? The social sciences have amply demonstrated the role of culture, experience and even education in behaviour that is considered feminine or masculine. These behaviours vary according to time and context. Worse, essentialist explanations end up trapping both men and women in a regressive outlook. The more important factor, here, is women's place in social relations – the relations of production, and therefore of exploitation and domination. Looking at these factors shows how all manner of systemic injustices weigh even more heavily on women. According to the United Nations, while women make up 51 per cent of the world's population, they do 66 per cent of all work and receive just 10 per cent of all income.[8] They account for 43 per cent of the world's agricultural workforce, but only 13 per cent of farm owners.[9] In France, on average, women earn 23 per cent less than men.[10] Women account for 80 per cent of part-time work and two-thirds of minimum-wage jobs. They bear the brunt of the destruction of labour rights, particularly with regard to retirement, since, on average, their pensions are 40 per cent lower than men's. In short, when a society reaches the heights of exasperation, women have even more reason to be angry. This is not because of their temperament, but because the gendered organisation of society makes women responsible for keeping up the day-to-day continuity of material life. It forces women to keep everything going, while, at the same time, it makes this impossible.

Reproducing society

All this is well known. But it is often treated as an aside. Is this not just another box in the list of the evils of capitalism? No: it is more than that. The gendered division of labour is a necessary condition for the survival of

the system. Profits are made in the productive sphere thanks to the unpaid labour of ‘social reproduction’. Looking after the children, cooking, looking after the home, maintaining the social ties of the family unit: all this is work done by women for free. And they do it to keep capital’s workforce alive and in the best possible shape. To this volume of work must be added women’s own paid work and the tasks of coordinating the family. In total, more hours are spent each year on household work than in employed work. Without all this activity, the productive sphere simply cannot function. Through the patriarchal organisation of human relations, capitalism is thus outsourcing a huge proportion of its real production costs. If these costs were integrated into their businesses, none of them could turn a profit. In other words, there is a direct relationship between an economic system based on the commodification of everything, and its unfunded precondition. The surplus-value derived from exploited labour is made possible by tasks which capitalism does not pay for and cannot itself replace. In capitalism, the oppression of women is perfectly institutionalised by the separation between the activity of ‘reproducing and maintaining people’ and the activity of ‘making profit.[11] The former is assigned to women who are subordinate to the latter. A role is imposed on them: keeping up the bottom line of the organisation of society, otherwise known as its social reproduction. This bottom line breaks down when neoliberal ecological and social devastation make everyday life unmanageable. But then the problem is how to survive, and not just a matter of expressing an opinion.

This is why, in both historical examples and contemporary citizens’ revolutions, women’s involvement always takes on such a determined form, on the offensive. Their commitments have their behavioural root in the vital tasks that have become unmanageable and therefore untenable.

The women’s army

It is also worth noting, at this point, that citizens' revolutions often coincide with mobilisations in various sectors of social reproduction. In France, in recent years, we have repeatedly seen care assistants, nurses, school assistants, chambermaids and others at the helm of feminist and anti-capitalist struggles. One remarkable such case was the victorious strike waged by the chambermaids at Paris's Ibis Batignolles hotel, led by Rachel Kéké, who was later elected to the National Assembly for La France insoumise. After twenty-two months of struggle and eight months on strike, in 2021 the chambermaids won an agreement to improve their working conditions. Another such example is the renewed practice of the 'feminist strike'. On 8 March 2017, in over thirty countries, feminist movements organised an international strike of women in both production and domestic work. The following year, Spanish women organised a twenty-four-hour strike to bring the country to a standstill, following a year of preparation and citizens' assemblies. There were 6 million demonstrators. On 8 March 2023, French women took up the slogan as part of the movement against the rise in the retirement age. All these struggles expressed an overtly anti-capitalist popular feminism.

Without women, there can be no revolution

Women's involvement is not only a consequence of a situation becoming truly serious, but also a factor in making this happen. It amplifies the signal felt deep within society. A friend of mine who witnessed events in Iraq told me, 'This makes us see how the movement can't stop at noting the presence or absence of women. It has to strive to make it easier for them to get involved, and to encourage it, for the sake of radicalising the struggle.' This was a general comment. But it was also directed at men within the family setting, who are often the last barrier to women mobilising, whether that means women in general or their mothers, wives or daughters more particularly. The presence of the army of women in a movement integrates

the half of the population that had hitherto been discounted, and integrates them into a front-rank role. But, when we are talking about a citizens' revolution whose characteristics are linked to the urban condition, perhaps their raw numbers are not the most important consideration. The really decisive factor is their relation to the collective networks of everyday life. The demands in this area will be made all the louder if they are coming from the front-line users. The presence of women is therefore both a guarantee of material rootedness and an informed extension of the fronts where the struggle is waged. There is a slogan in Latin America: 'Without women, there can be no revolution.' This is proven in practice too. The practitioners of the citizens' revolution must grasp the full significance of this.

The phases of revolution

Breaking the wave

We have seen how prior developments help prepare the way for the contingent event that sets things moving. Having started from that point, the revolutionary processes around the world culminate in three characteristic moments. We can give them each a name to situate them and to better memorise the typical sequence of events. Still, if these moments have certain characteristics in common, this does not mean that they play out at identical rhythms. Each phase has its own particularities. The key, of course, lies in handling the phase transitions. At any moment, a process can speed up, slow down or even grind to a halt, if conditions favour one or another of the parties to the conflict. In such cases, governments tend to proceed in more or less the same way. They all rely on a degeneration of the conflict, dramatising it and staging street battles. They all resort to extreme

and violent strategies of repression in order to dissuade the involvement of families and the elderly, whose presence otherwise gives such encouragement to the movement. All of them attempt strategies of diversion or dividing the people. They all rely on a media system whose talking points and imagery are coordinated, in particular to cry blue murder over popular violence and to disparage the movement's spokespersons. Sometimes this works. And, sometimes, when the movement is steered in the wrong direction, this can lead it down a blind alley. But, at other times, a surge of indignation in response to cases of police violence will accelerate the revolution. This can also happen when there are visible signs of how isolated the authorities are. This may also come from a rising tide of strikes and blockades that meet with special popular approval. In a revolution, everything is in movement and everything is volatile. Political action consists in establishing the possible bases of support and the openings that will allow action to proceed. We saw this in France, for example, in the movement against the rise in the retirement age. The aim was to prevent the adoption of the particular article of the law establishing this measure. It was important not to give the social movement in the streets the sense that its aim was to eventually repeal the law, rather than to stop it happening to start with. For that would no longer be the same fight. We had to gain time to allow the movement to take root and perhaps outgrow the sluggish, repetitive strategy promoted by the meetings of trade union leaders.

But what are these three names I mentioned?

The instituent phase

The first phase of action after the contingent event is known as the 'instituent' phase. This is when people start to move and establish themselves in their own eyes and in the eyes of society. The media system plays a role here. Often, in order to retain its own preferred format, it will give the movement a name, create a summary version of its motivations and

pick its figureheads. This phase often earns the movement media sympathy. Yet this then turns into palpable hatred when the media system resumes its role of maintaining order, leaving people with the taste of betrayal and appalling bias. This instituent phase takes many forms. A name is found, and common symbols, songs and slogans are repeated as events unfold. When established organisations have initiated the first mobilisations, the movement will gradually change the nature of its relationship with them. Initially enchanted by – and fairly compliant with – organisational instructions, the movement then gradually gains its own autonomy, and its own forms of expression and deliberation. The organisations then have to follow and adapt to keep in touch. This whole phase continues on as one event follows another. Then another event comes along and the whole process will pass through a crucial stage, a particular moment. In France, in the battle against the pension reforms and the series of episodes of parliamentary struggle, the crucial moment was the government's decision to use Article 49.3 of the Constitution. This allows it to proclaim that a bill has been adopted, even without there being any vote in parliament. The force and the self-confidence that had built up over six days of action, counting millions of demonstrators, had its effect here. Immediately, without instructions, crowds gathered outside town halls and began a series of spontaneous actions. The signal had been given, and it was confirmed in the days that followed: the movement decided that it would continue onward. But then the force of events gave the movement a different meaning.

The destituent phase

Refusing to accept a law that has been passed is obviously a powerful act. But it does not have the same meaning if this is merely proclaimed, or if it means a concerted action of blockades and all-out confrontation. In this case, an insurrectionary logic necessarily prevails. The day after a censure

vote in the National Assembly narrowly failed to no-confidence the government, the president ventured into yet another confused and muddled speech. It was all too apparent that he wanted to move on to other subjects, to make people forget about the confrontation that was still taking place. Instead, he encouraged renewed action. And the slogan ‘Macron resign’ appeared at all gatherings, all demonstrations, on every occasion, even at theatre plays. The call went out to arrange concerts with pots and pans wherever the president or members of his government might go. This made it impossible for ministers to go on visits, and prompted prefects to abuse their powers in all sorts of ways. For example, there was a ban on demonstrations in an entire *département* because the prime minister was visiting. This was all done in the name of a law designed to combat terrorism. This led to further rulings overturning these decisions, which in turn plunged those responsible into ridicule. We also saw this in the remarkable events at the 2023 French football cup final: red cards were banned from the public seating areas, and the president remained holed up in the corridors of the stadium rather than head onto the field and face the crowd.

Depending on the country in question, this destituent phase may end either with the popular movement breaking up, or with some kind of victory. Perhaps the president will flee, or the government will resign, or it will repeal the law that prompted such opposition. This is the phase of the slogans calling for their removal from office. In Tunisia and Egypt the slogan was ‘Get out!’ and in South America ‘out with all of them!’ In France, it was simply ‘Macron resign.’ In Iran, the revolt against the clerical regime began with the death of a woman accused of wearing her headscarf incorrectly. Notably, these women’s main act of insubordination was to appear without these garments. Some even burned them in public, to the applause of a crowd made up mainly of young women, and men who had come to support them in the face of police repression. The removal or

burning of the headscarf is surely not an object of ‘struggle’ in itself. The gesture has a broader importance. It represents a desire to decide for oneself what to wear, rather than be subject to patriarchal constraint. The demand serves as a denunciation of all forms of infringement of women’s rights by the clerical regime. This also means the restrictions on contraception and the right to abortion. This was followed by the classic phenomenon of immediate demands ‘growing over’ into demands for political power. The first phase had been the people’s ‘instituent’ moment. It quickly turned into action demanding political power itself. The slogans exploded outside the initial framework. This was the ‘destituent’ phase, aimed at tearing down the foundations of the regime: ‘Woman, life, freedom’/‘Down with the dictator!’

When the system collapses and political leaders flee, another phase begins. This is the phase in which the people rebuilds the country’s political framework.

The constituent phase

The ‘constituent’ phase owes its name to the many times when the ‘destituent’ process has ended with the calling of a constituent assembly. The assemblies which are thus called author a new system for organising democratic powers. Sometimes such an assembly is called in vain. This happened in Brazil under the presidency of Dilma Rousseff. The movement ended in a quite different way. The ensuing retreat obviously put the wind in the sails of the conservatives, delighted by this development. Sometimes this phase unfolds as a process wide open to popular intervention and countless debates, as was the case in Venezuela and Ecuador. In the first case, the articles under debate were printed on packets of rice and pasta so that people could discuss them with their families. In the Ecuadorian case, the constituent assembly was held outside the capital. It received hundreds of delegations from various localities with all manner of requests and

proposals. The outcome was positive in Tunisia, Venezuela and Ecuador. It was heavily defeated by referendum in Chile. The many different results show that this is no administrative formality, but a political battle from start to finish and at each moment. Convening a constituent assembly is a highly sensitive stage. Many governments prefer the top-down method: a text is proposed, and voters can take it or leave it. This was General de Gaulle's method in France in 1958 during the turbulent events of that era. But when the process starts from the grass roots of society by convening a dedicated assembly, the situation takes on a different complexion. We then see the people constituting itself politically based on the rights defined in the debate and adopted by the constituent assembly. We see all society taking up the issues under debate; in this sense, the constituent phase is the height of politics. On this basis, the revolutionary strategy can be defined by the struggle to convene and hold a constituent assembly. This alone provides the democratic legitimacy that today's revolutionary project needs in order to set out along a new path of ecological and social transformation. This phase is vital to the success of the project, given the depth of the changes that need to be made. An elected constituent assembly builds consent for its project. It defines the rights and objectives that will apply from now on. Then the ecological and social turn can become a democratic process, and not a violent one imposed by a government on society from one day to the next.

Long cycles

The citizens' revolution does not always take place in a short, delimited time period. It is a process. It often lasts several years rather than just a few months. Its various episodes fit into the long cycles during which the authorities' power falls apart. For example, we could say that France entered into a cycle of citizens' revolution starting with the Gilets Jaunes movement in November 2018. The major social movements in France since

then, such as the mobilisation against the pension reform in 2023, have fitted into this revolutionary perspective. But, of course, for the moment they have not gone the whole way. This is also true of most countries pitched into similar processes by dramatic upheavals. This shows how sometimes the popular movement can fail to move from the instituent phase to the destituent phase and then onto the constituent phase. This may be the product of repression, or of the movement's own limitations. But, as long as the movement does not manage to go all the way, and as long as it is not definitively crushed by the powers that be, the cycle continues, through its high and low phases. These episodes include the great social movements, which we have described in some depth in this chapter. But, in countries where elections are held, electoral cycles can also play a decisive role in bringing about the crucial phase transitions. This also points to the tasks incumbent on the political movement that seeks a citizens' revolution. To sum them up in brief: its role is to help with phase transitions, to give the constituent phase its content, and to help it resist being watered down.

IV

The New El Dorado

12

Networked Capitalism

Capitalism’s constant transformations

The new global capitalist space–time fits into a smartphone. Capitalism has changed once again. For sure, its objectives remain the same. But its methods are revamped time and time again. In fact, this is in its DNA. So, if we want to confront capitalism effectively, we need to understand it as it really exists today, and not as an abstraction that stands above historical time. Today’s capitalism is based on today’s conditions: large numbers, urbanisation and the central role of networks. We have seen how the city has remoulded contemporary human socialisation by creating the conditions for the market and the division of social labour. It has also given rise to networks – and to their extension to embrace all human activity. Networking is the emergent property of our age. It is at the root of a far-reaching reorganisation of the productive apparatus as a whole. While this is often called ‘globalisation’, the term is in many ways unsatisfactory. There have, after all, been several waves of globalisation across human history, and this wave is quite unlike the others that went before it. It would also be mistaken to see this simply as a matter of exploiting the race to the bottom between the production costs at different production sites around the

world. Thanks to the new digital networks spanning the globe, this new way of producing can create a seamless continuum that spans the instantaneous control of all the stages of production, its logistics, its exchanges and all the financial transactions in between these various moments. Globalisation is the name that we give to the moment when finance has the direct digital and physical means to link together all the networks through which profits are collected. Digital globalisation thus allows for a transformation of the process of capital accumulation itself. The extraction of surplus value is no longer essentially centred on raw production, but on the circulation between the different moments of its realisation. In this context, access to the means of this circulation becomes crucial. Here we can see the capacity of network capitalism to draw on a new source of accumulation: the tribute levied on this right of access. This appetite is fuelled by a strong trend towards the increasing monopolisation of both material and immaterial networks. This, too, is the result of the dynamics of capitalism in each of its different historical phases.

The new capitalism

Globalisation

Of course, production is still the nest from which capitalist accumulation must take flight. Globalisation is simply a name for the geographical dimensions in which this activity takes place. As it happens, globalisation in itself is nothing new in history. All the empires of the distant past organised some form of globalisation. Most often, it was a form of forced cooperation that allowed the strongest to prey on the rest. But the material process itself was based on comparative advantages between production sites, and often on exclusive control of local production. This has been the case throughout

human history – for instance, since the first production of copper, the first metal to be smelted around the mines of its original rock. It was produced where it was available. But today's capitalist globalisation is not the same as that process. It shapes the international division of labour – that is, the distribution of the stages of productive labour between different countries – in a very different way to that of the past. This is because no purely technical leadership, no particular local know-how or natural advantage, still plays any important role therein. The only difference between an electronic sensor assembled in China and one assembled in Europe is the price, fifty times higher in one place than in another. In other words, it is a question of the social balance of power between capital and labour. The whole process is devoted to lowering the cost of each stage of production: that, and nothing else. Its only *raison d'être* is to produce and extract added value. This is achieved by generating competition between the price of different populations' labour. But it also depends on the legal environment in which production takes place, which may be more or less conducive to capital's interests. The exchange-value, and therefore the price, determines the order placed and the norms obeyed at each stage of a long chain extending from production to delivery. This form of organisation produces value creation. It was developed for this purpose alone. It produces a reorganisation that has changed the whole model of capitalism.

A holy trinity

This reorganisation is driven by a wider context. The masses of the urban population require a level of supplies that would be unattainable if not for the combination of multiple supply chains. Everything must be immediately accessible. The network becomes the necessary instrument for 'just-in-time' production and 'direct-to-consumer delivery' from one end of the world to the other. This has also affected the way in which society functions. Users and customers now form a well-calibrated, indeed insatiable, machine for

hoovering up standardised goods and services. At the same time, it is possible to increase the number of customers and speed up the cycle of money and goods. It's a dream for the accumulation of capital, and the networks made it reality. But for all this to be possible, there also have to be material and legal instruments to ensure fluid circulation between the stages of production and sale. This is also leading to different ways of organising private property in production. Indeed, globalisation is not just a division of labour, but a particular way of organising production. It presupposes particular means of action. The different factors cannot be separated. Rather, the new system is built on three pillars. Logistics make it possible for material networks to function. IT organises circulation. And finance commands and condenses the whole process.

At the speed of information

Today, the various production sites that are needed to produce a finished product may be dispersed across dozens of companies in different countries. This could even make us lose sight of the reasons why they used to be brought together in a single place. The aim was to shorten transit times and information between the stages of production. This was the general rule in the nineteenth century and in the first half of the twentieth. To make a car, it is not enough to have one person making the wheels, a second making the bodywork, a third making the engine and a fourth to sell it. Rather, it all has to be done according to the one same plan, within the right time-scale and in the right quantities. For this to happen, a great deal of information has to circulate; indeed, this is decisive. In the past, this could only be done effectively by grouping activities in the same place. The spread of digitisation and then the Internet have made it possible to abolish the spatial barriers to the circulation of information. Its cost has been reduced by a factor of 100 billion since the second half of the twentieth century.[1] Added to this situation is a dizzying fall in the cost of logistics transport. This has

made it easier to break down all the stages of production across space. They can now be distributed across the globe without this posing any problem for the assembly process. As we all know, these days jeans and mobile phones travel the equivalent of several times around the world before they reach a buyer. Often, the main lesson we draw from this is the extravagance and environmental impact of such a way of producing things. But we should also consider another effect that this has, in empowering the world of networks. This itself forms a new terrain, capable of fundamentally changing all of capitalism's traditional constituent parts.

Without walls or machinery

In June 2001, I held the ministerial brief for vocational education in Lionel Jospin's government. I had a keen interest in industry, since my task was to organise the training of young minds and my country's future technicians and highly specialised workers. Suffice it to say that my morning coffee did not go down too well when I read in the paper that one leading French boss had said, 'Alcatel must become a company without a factory.' At the time – and to our great misfortune – Serge Tchuruk was at the helm of this national flagship mobile-phone company. As a result of his calamitous management, Alcatel was gradually carved up and finally sold to Nokia in 2015 under the supervision of Emmanuel Macron, at the time France's economy minister. The idea of a multinational without walls or machines was first formulated and put into practice by Nike. The brand denied that it was a shoe manufacturer. All it had was a patent, a cheque book and a distribution network. Tchuruk's provocation in fact concealed a deeper truth about the reorganisation of capitalist ownership structures. The dominant players control production from a distance rather than get their own hands dirty. The dominant multinationals are the ones which manage to organise a complete network of information flows so that they can control production on a global scale. They do not own factories, fields, mines or forests, but set

up networks capable of coordinating sawmills, farms, mines and factories. This organisation is the direct, actually existing, form of capital accumulation when it takes the form of a ‘global value network’. This is not simply a windfall effect. Rather, this method responds to a real problem: that of the tendency of the rate of profit to fall, generated by the stagnation in labour productivity since the 1970s.

The best service

The networking of production has offered capitalism the greatest of services. It optimises production sites in order to find the lowest social or environmental cost, the rules that most suit it, or better state subsidies for each stage of production. This approach compensates for the other weaknesses that capital has, such as the lack of investment for developing products and production processes. All this serves to keep profits up despite wider downward trends. This has become a common strategy in today’s globalised capitalism. The world’s top 200 multinationals alone command two-thirds of global trade. This involves trade between subsidiaries of these groups and between them and their suppliers, subcontractors and distributors. On the scale of international trade, they act as a network bringing together many scattered players. Trade within these globalised networks is a direct means of capital accumulation, and not just a way of organising direct productive activity. Not only is it impossible for production to do without these networks, but profitability depends directly on the spatial distribution of production prices, transport prices and exchange rates between currencies. Of course, production remains a necessity. But to capture profit, the key thing is to control the spatial distribution of the process, through the networking on which it relies. Without this, there is no point in producing.

Globalisation

I have summarised the role of logistics and digital networks in enabling globalisation, which is in fact a highly integrated process. This integration cancels out the fragmentation of the production process. Control of global space–time then becomes multinationals' means of profiting from production. This is what we specifically call 'globalisation'. But I should point out one other part of the problem: one network on its own cannot complete the whole cycle of a product's circulation, including its transformation into a commodity available for actual consumption. My favourite Italian restaurant serves the best asparagus risotto in Paris. But how many networks are involved in getting the asparagus to the chef? The crop has to be sown, and before that, of course, the seeds have to be produced and transported. After the asparagus is picked, it is off to one warehouse and then another. It has to be packaged in a factory. The factory itself takes in the jars, lids and labels from different places. Each of these objects could be the subject of an entire chapter, to trace it back from the moment of final assembly to the extraction of the materials, and the thousands of miles' transport needed in between. And there are just as many invoices issued between these stages. How many networks are involved? It is impossible to say without studying the question in detail, but there are a lot of them. Ultimately, none of this could be achieved without the activity of another decisive network: the one where use-value finds its customer. This is the food retail network. This business generates a turnover and therefore a profit, which is passed up the chain from one end to the other to produce a new order, in turn reactivating the circulation of goods and money through the same stages. This example illustrates a more general reality. Networks need to link up their respective functions. Multiple networks have to be involved in the circuit of goods: the logistics network, digital network and the commercial network. These themselves have to be globalised, brought together and homogenised. Digital globalisation does

just that. Everything can then circulate in a single order of equivalence: the equivalence of money.

Finance as a meta-network

All this can quickly descend into a chaotic bazaar, and it does so at frequent intervals. But this is not always true, and there is a coordination mechanism at work. This is not a central planning process geared towards rational objectives – far from it. Rather, capitalism is only ever coordinated by prices, monetary exchanges, debts and credits. The financial markets play this role. This is the meta-network, the network of globalised networks, the master and creator of globalisation. The global financial sphere, which has no face and no address, connects all these stages through the transactions that allow them to happen. All the stages of the world of networked capitalism – which is indeed a material reality – are controlled by the financial bubble and its speculative games. A good example of the power of finance can be seen when an oil tanker changes direction once it is already en route, because along the way its cargo has been sold on the markets for some different use. This is no isolated example. It can also be seen in the financialisation of agriculture. On these exchanges, agricultural products are acquired for different destinations and uses even before they are sown and then harvested. They are resold several times at different stages of production and transport. A single harvest of wheat may be traded forty-six times, and a harvest of maize twenty-four times.[2] For the financial markets, wheat is no longer wheat and maize no longer maize. It is a flow of money.

The permanent crisis

The financial sphere is an octopus, an overweening growth that hangs over the entire economy. Let us look at its size. One way of measuring this is to grasp the value of all the shares in all the companies listed on the stock

exchange. In 1975, this total was $1.4 trillion. In 1995, it was $17 trillion. And now? $65 trillion![3] Over this period, the financial bubble has expanded forty-five times over. But world GDP has grown by ‘only’ three and a half times.[4] Every day, an amount equivalent to 115 times the value of world trade in goods and services is traded on the financial markets. A bubble! This system is constantly operating at the limit of equilibrium. It is metastable. Even the slightest jolt can throw it into a complete mess, causing it to veer off course. The sub-prime crisis in 2008 illustrated this brilliantly. The crisis resulted from the offering of home loans to people known to be unable to repay them, with the intention of recycling their houses at low costs once they went bankrupt. In this case, the little jolt came from one or another of the many buyers who started to lose their footing after they had bought a house on credit. I have heard of divorces gone wrong when the dispute between the ex-partners meant that neither of them wanted to settle the mortgage. But, in this case, the whole system was swept away: banks, car manufacturers, container ships, sneakers, telephones – and even our all-important asparagus. Financial globalisation has turned network capitalism into a breeding ground for chaos.

The new monopolies

Natural monopolisation

Let us recap. The transformation of capitalism into internationalisation and globalisation actually involves a worldwide networking of production in order to generate profits. OK, but whose profits exactly? The figures show that they are increasingly concentrated in the hands of a few multinationals. This trend goes hand in hand with a fall in the number of very large companies. It is the exact opposite of the myth about start-ups, Silicon

Valley and healthy competition in the ‘knowledge economy’. Monopolisation and the concentration of capital are powerful spontaneous trends in the capitalist mode of production. Moreover, the economic laws governing the operation of networks show that the tendency towards monopolisation seems unstoppable. The larger a network, the more branches and connections it involves, the higher the cost of its creation and the lower its operating costs. In these conditions, it would be absurd and counterproductive to double the efforts of an existing network. That is why there is one rail network, one electricity network, one sewage network per municipality and so on. So the owner of a network faces the following situation: they control an object that users cannot do without, and for which they usually have no replacement option. The owner can impose a price of their choosing, without running any risk and without users having any alternative. The nature of ownership is changing. There is no longer any question of capturing free labour. The price is no longer a function of the amount of exploited labour needed for production. It is, rather, a right of access to use the network. It is paid by those who do not own it to those who do. It is a tribute payment.

To put that another way, this is an imposition of social power. In the age of networks, capitalism has revamped an essential practice of the feudal era.[5]

Groundless profits

Ownership of a major infrastructure network rakes in profits such as can rarely be found in manufacturing. Let us start with examples we all know: the networks we use every day. The logic will always be the same for the true masters of capitalism, the owners of the networks on which globalisation is built. Motorways are a well-known example in France. This network used to be public and state-run. The public purse financed all the heavy initial investment required to build it. But in 2005 the motorways

were privatised. Three giant companies in the sector carved up the whole territory. They took over fully functional infrastructure, whose construction had long been financed by taxpayer money. Since then, the motorways have been like geese laying golden eggs. In the years following privatisation, tolls paid by motorists rose by some 20 per cent.[6] So, in just five years, the dividends paid to these firms' shareholders surpassed the amount that had initially been paid to buy the network from the state. So little investment was required that dividends ranged between 90 and 100 per cent of the profits made. This is a pure case of tributary capitalism. The private management of motorways does indeed function as a tribute in the sense of feudal society, and it mirrors its practices. After the privatisations of recent decades, there have been countless such examples. In France this is also the case for electricity and gas. The disappearance of the public firms EDF-GDF and the opening up of the energy sector to competition have caused prices to soar. As a result, many users are excluded from access: 12 million people in France cannot heat their homes adequately, or even at all.[7] But this decline is largely offset by the extra costs accepted by the rest of the customer base, who have no other choice. Monopolies make it easier to discriminate socially against users who have become customers, thereby creating scarcity. It is always a direct aid to increased accumulation.

This is why we can see superprofits in these sectors. We can say that they are 'groundless', in the sense that no innovation or technical leap has been made to improve or transform the actual service. All that is happening here is that the propertied impose their power over the end user. In France, for example, between the period before the arrival of COVID-19 and the end of 2022, profit margins in manufacturing industry and market services were stable. But they soared in sectors that rely on the control of networks: a 27 per cent rise for the energy, water and waste sector and 11 per cent for the transport sector. In these two sectors, the margins taken represent 70 and 55 per cent respectively of the added value produced.[8] Traditional

capitalism could not possibly achieve this same profit margin. So we can identify what is specific in this situation by calling it a tributary system. Its margins represent the price paid by everyone for the right to heat their homes, have running water or travel. They are the yardstick of these capitalists' dominance.

Digital monopolies

We find the same phenomenon also on a higher scale. The big winners in globalisation, the capitalists who dominate all the others, are the ones who control the networks of production. I have already dealt with the power of finance at length, and I will not go over all this again. But the power of digital networks deserves closer examination. Over the last fifteen years, companies in this sector have seized power globally. Of the ten firms worldwide with the largest market capitalisations, seven now have something to do with the digital sector. What does this mean? Here too, the effect of the network, the monopoly and the tribute is fully at work. Although digital networks are intangible, they benefit from economies of scale and complementarity effects just as much as tangible logistics networks do. For each subcontracting production unit, it is cheaper to join in the global network set up by the dominant company than to develop its own independent networks with its suppliers and customers. This creates a natural monopoly. It allows those who control this monopoly to impose a price on all those who use it. Typical of this situation is the case of supermarket chains, who stand atop a whole welter of suppliers and intermediaries. Since the 1990s, they have created digital networks to manage all the traffic within these chains. The fact that everyone uses the same digital network produces efficiency gains: fewer stocks, shorter lead times, fewer errors. But because this is controlled by the major retailers, it is also they who capture the extra profits generated. The gains are not fairly distributed to asparagus, strawberry or milk producers. What is really

changing is the way in which profits are concentrated. Multinationals are now in a position to steer the production carried out by others. They can impose a right of access, a toll – in other words, a tribute – on all the other players, from subcontractors to workers and consumers.

Innovation rent

So a digital network can pull all of the stages of production into a single web, from design to sales, production and delivery. But this is not its only virtue. In fact, the network itself produces new information through its operations. This information can have a decisive impact on the quantity and, above all, the quality of production. How often are deliveries returned? Why are they happening? In what time periods? What age group is fondest of a given product? A digital network can capture all this information and much more. The more the data is cross-referenced, the more the data points multiply, and the more precise the targeting of the commercial supply. Controlling such networks also guarantees a monopoly on all this information. It thus also means the ability to use this information to fine-tune production processes to the owner's advantage. This is an intangible process made possible by the 'data mines' generated by the information that consumers provide about themselves. Control over the network therefore creates a kind of innovation rent for its owner, and hence a strong command of consumer preferences.[9] It makes it possible to prompt consumer choices, and, better still, to guide and modulate them through the market supply. These are the basic mechanisms of our voluntary servitude to the forces of habit and fashion.

The new battle for control

Networks and empires

Internationalisation and globalisation do not happen without states. This new way of organising capitalist production does not erase the existence of geopolitics. There is an intense battle between nations for control of the networks that structure globalised capitalism. This is what is at stake in wars, conflicts, diplomacy and imperialism. Of course, none of this is totally new. Roads, waterways and paths, and their crossing points, such as passes and bridges, were the first material networks. Were these not the first things at stake in the fight for military conquest and sovereignty? But, once again, there has been a qualitative change in the situation. Yesterday, if we could not hold a position at a key point in the network, we could retreat. But what about today? Can we say the same if we are deprived of access to the pathways of digital information which link almost all human activities together? The network is global. Some 99 per cent of electronic communications passes through submarine cables, considered 'critical infrastructure'.[10] The fact that their cost has halved and the number of intercontinental links between Asia, Europe, Africa and the Americas has multiplied means that today they play a much greater role in all areas. The result: we are seeing an increase in the means of controlling and protecting these cable's continued functioning, albeit at the risk of all kinds of conflicts. The current level of investment points to a forthcoming phase of concentration, as is the general rule in the market economy. Without doubt, the transition to a monopoly is already raising increasingly serious questions of sovereignty and democracy. We are seeing this start to happen even today. Google and Facebook, two giants in the collection of personal information, are already investing in their own private cables to give them total control over the flow of data. If 'metaverses' controlled by these firms take root, then the control of parallel virtual universes – and the various commercial activities that take place therein – will, in turn, become a

territorial issue just as concrete and decisive as the annexations of territory in the colonial era.

The geopolitics of strategic networks

For the time being, the vital networks of our era, such as oil and pipelines, maritime routes and now satellite swarms, remain decisive. Their length, connections and distribution on and around the Earth's surface make up the most significant geopolitical map. We have seen how the race for oil wells paved the way for the German and Japanese invasions of the Soviet Union and China during the Second World War. Since then, pipeline routes have repeatedly been the key factor behind the most important conflicts of the late twentieth century and the first decades of the current one.

Such was the case for the NATO intervention against Iraq after it annexed the oil fields of its neighbour Kuwait on 2 August 1991. This intervention was even said to usher in the 'new world order' announced by US president George H. W. Bush after the fall of the Soviet Union. A tug of war over pipeline routes can again be found in the invasion of Afghanistan, and then in the conflict in Syria after Da'esh's proclamation of its caliphate in 2014. In Europe, the route of the two gas pipelines, Nord Stream 1 and 2, linking Russia to Germany, was the subject of relentless hostile pressure from the United States during the decade when it was under construction, with no consideration of the billions of euros invested by Germany. The final sabotage of this network in the deep waters of the Baltic on 26 September 2022 settled the dispute. It has been noted that this happened exactly one day after Norway and Poland opened up an alternative route. Geopolitics remains a question of nationstates, since they alone can guarantee that networks will remain sustainable. A comparison with past situations regarding gas and oil will help us to understand the special place of the new networks which are involved in ensuring the continuity of human civilisation.

The new network wars

Without doubt, the web of oil and gas networks still does map the terrain of conflicts and tensions. But these are no longer the only ‘essential infrastructure’ at issue in today’s conflicts and power struggles. Other, far more sensitive, networks are now taking centre stage. These are the fundamental ecological networks. Such is the case of access to water. There are more than a dozen areas of tension on this subject, between countries around the world.[11] We see this when a dam cuts off the flow of a river that passes through several countries, or when a country washed by a river installs massive water extraction facilities. We find one tragic example of dams’ strategic importance in the destruction of Ukraine’s Kakhovka dam. Wars over water networks are surely not far off. This type of conflict promises to be all the harder-fought – and more violent – because it involves a resource decisive for human life itself. On closer examination, conflicts over water use begin within national borders, when farmers and city dwellers clash over how it is distributed across different human activities. This clearly shows how the international issues linked to these networks are rooted in the everyday uses of the countries concerned, but also in their internal social balance. Networks thus both depend on and produce the political relations between nations. They likewise lead to conflicts and underpin or build on legislation. Their modus operandi and their continued existence are thus crucial issues in international relations, insofar as they now do much to shape these same relations. In this context, the sabotage of the Russian Nord Stream gas pipeline and the Kakhovka dam in the heart of Europe ought to serve as a wake-up call. The sustainability of transnational networks; the political and financial conditions for their physical continuity, monitoring and protection; and equal access to the services which they provide are the key issues of our time. Ensuring the security of borders has been an issue of concern since the League of Nations in the twentieth century, but this alone is no longer

enough. The physical infrastructure on which networks rely connects questions of national sovereignty with realities that cross national borders. These transnational issues are now so important that they are the most obvious and permanent source of potential difficulties. This is true on a transnational scale, with chains of dependence which involve the interests of multiple countries. There is a greater risk than ever that conflicts will spread the whole way along these chains.

This demands that today's diplomacy plays an essential preventive role. Obviously, this has to mean lowering tensions and preventing conflicts. But it must also guarantee a specific field of supranational rights, in order to ensure the sustainability of global networks. For if the operation of these networks confirms the sheer degree of human interdependence in the contemporary era, then these networks also become common goods on which entire populations' survival depends.

In the more than three decades since the fall of the Soviet Union, the United States has been the undisputed master of this world order. The digital network has been rolled out under the hegemony of US multinationals, in such a concentrated form that they can be referred to by an acronym: GAFAM (Google/Alphabet, Apple, Facebook/Meta, Amazon and Microsoft), otherwise known as the Big Five. As we know, despite the heroic myth of the Californian entrepreneur starting a great empire alone in his garage, the whole thing was actually built on subsidies and public support from the US federal government. The Internet itself was the result of years of loss-making military investment before it was privatised in the early 1990s. Uncle Sam's digital giants would simply not exist if it were not for the power politics of their government, and in particular its army, pouring billions of dollars into them. The US military's espionage agencies are sure to remind these private companies of their allegiance to the empire when they want to dip into their data. The international trade transport network, particularly by sea, is also under US authority. The ultimate

guarantor of the sea routes used by container ships is the US Navy, with its 300 ships, including eleven aircraft carriers and seven fleets distributed across the world's oceans and seas. Finally, financial globalisation has unfolded in a single currency, the US dollar, and under the unquestionable domination of Wall Street. The United States' total empire derives its hegemony from its control of the major networks: it dominates digital networks through GAFAM, international logistics through military force and a financial meta-network through the New York Stock Exchange. But should we be talking about all this in the past tense? In recent years, the world networked in a unified globalisation process has been fracturing. China is trying to build its own networks in every field. The Belt and Road initiative includes sixty-eight Asian, African and South American countries under Chinese leadership. It presents itself as a collection of gigantic investment projects in roads, ports and railways, financed by the Chinese banking system. China has also seen the emergence of its own digital giants. BATX – an acronym spelling out Baidu, Alibaba, Tencent and Xiaomi – is standing up as the direct competitor of the United States' own GAFAM. A new battle is underway for control of the major networks. It is nothing less than a battle for hegemony over global capitalism.

V

The Emergence of a Single Human People

13

An Alter-globalising Diplomacy

The end of the world that was

The historical sequence that began at the start of the twentieth century with the rise of US political dominance is reaching its end. We are entering a new period of international relations and of the geopolitical order. Naturally, this is a long-term process. It is not purely a result of the wishes of the parties involved. Contingency will play its role, here, as will the internal contradictions of each of the concerned parties. And, of course, global climate change will have all manner of consequences for people, for economies and for the basic necessities of life, such as food and water. If, today, we can speak of three continental political poles – Asia, Europe and the Americas – these three are also about to see the emergence of the most dynamic concentration of humans on the planet, in Africa. None of today's leaders seem able to imagine what the contours and consequences of such an event might be. Finally, the new human expansion into outer space and into the depths of the oceans, beyond territorial waters, will raise its share of tensions and conflicts of an entirely new kind. Do we even still need reminding of how much the local depends on the global? Everything will be turned upside down. Reality is ordered from the top down as well as rising

up from local bases. Such a ‘glocal’ system functions like a living ecosystem. The whole conditions the life of the parts, and the parts determine the existence of the whole. Here, we are proposing a non-aligned, alter-globalising diplomacy. This does not mean neutrality, but building policy around common causes that serve a general human interest. This all has one aim: to help and support the political emergence of a ‘planet-wide human people’.

The new world order

The United States: planned tensions

We have mentioned that on the eve of the first invasion of Iraq in 1991, US president George H. W. Bush announced a ‘new world order’. That was over thirty years ago; just over a generation has passed since. In the intervening years, the United States has indeed attempted to build a new political order around itself. A whole system of alliances and interventions has been developed around the theory of the ‘clash of civilisations’, formulated by Samuel Huntington. So what has been achieved by all this? The global reality has changed, but the United States has not gained the advantage which it expected. Still, in Europe the United States has been greatly strengthened by the war in Ukraine launched by Russia in February 2022. The criminal and absurd invasion of Ukraine destroyed two decades of work to reintegrate Russia into a peaceful European space based on treaties. The US political victory is reflected in the fact that two previously neutral countries, Finland and Sweden, have joined NATO. It is also reflected in the sabotage of infrastructure, or more precisely the Nord Stream gas pipelines. These are two striking symbols of the failure of Russia’s strategy. Europe, for its part, has confined itself to so-called

Atlanticism, falling in behind the US strategy. This prevents Europe from taking any independent initiative in its own region.

The United States has also marked out other future geopolitical flashpoints, which can thus be read as Washington's own programme for action. One is the question of Taiwan's status. It serves as a pretext. China is an indivisible whole: the UN voted for this fifty years ago, indeed with the agreement of the United States. The other argument put forwards by the United States to justify its anti-China stance concerns that country's control over a range of extremely valuable technologies. It presents this as a matter of US national security. Is this really credible? In this day and age, blocking the spread of knowledge or know-how is not only an illusion, but also an intolerable display of dominance. But who cannot see what is really happening? Countries all over the world can access all the available knowledge as they wish – if they have the use for it, and the ambition to access it. Moreover, China clearly has the scientific and technical capacity to break new technological ground in the areas that the United States intends to shutter it off from.

The 'old assumptions'

The United States surely does want to have a strategy for relocating the kinds of production that will be strategically important in years to come. But the anti-China diatribe is just a pretext for doing this. Why does it need a pretext? The first reason is that it actually covers a far-reaching change of economic strategy. This shift also hurts the United States' traditional allies, particularly Europe. Its tariffs are not rising for China alone. And Biden's corporate subsidies are also drawing European firms to reinvest in the United States. This economic shift is justified on security grounds. It is easier to bring it to public attention in this form. It is also the opposite of the refrains that have been trotted out over the last four decades. The goal is no longer free trade at any price. This change of direction was announced at

the beginning of 2023 by both Treasury Secretary Janet Yellen, formerly chair of the Federal Reserve, and Biden's security adviser Jack Sullivan. You almost pinch yourself when you read a US government analysis whose tone and arguments seem borrowed from the alter-globalisation movement. Sullivan denounces the 'old assumptions', which 'championed tax cutting and deregulation, privatization over public action, and trade liberalization as an end in itself.'[1] Of course, a turn like this does not play out overnight. It will ebb and flow, above all because of the sheer inertia of realities that the United States cannot get rid of by decree. These include the real state of its economy, centred on services and finance; its dilapidated infrastructure; and its lack of savings to finance itself.

The threat from within

The other hurdle to overcome is the climate crisis, when it hits the United States. Far from what the hare-brained ideas of the US far right might tell us, the biggest domestic threat is climate change. The United States will be hit hard too. The American West, hitherto the cradle of agriculture and a source of water, is already in the grip of a chronic drought. In total, one-third of the United States is threatened with having to live with a Sahara-type climate.[2] But that is not the worst of it. Forty per cent of the US population lives no more than sixty miles from the sea.[3] That means a lot of people exposed to rising sea levels. This rise is expected to be between ten and forty-five centimetres, depending on whether you live on the West Coast, on the East Coast or in the Gulf of Mexico. A 2015 study already identified the states that would be worst affected: Florida, California, Louisiana and New York. Since then, global warming and its consequences have worsened. Many of the most populous cities will be under water by the end of the century. This is true of New York (8 million inhabitants), Miami (more than 5 million in its urban area) and New Orleans (whose urban area is home to a million inhabitants). That is a lot of people to move.

Or else the construction work to allow them to stay put will be truly titanic. The megalopolis of New York alone has 530 miles of coastline. It is easy to see how many miles of dykes will have to be built and how many buildings will have to be raised. Will the United States be able to control an inland collapse of this magnitude? Memories of the destruction of Louisiana by a hurricane, and its aftermath, remain all too fresh in the mind. There, we saw how little we can rely on the free-marketeer ‘every man for himself’ approach. Without doubt, this new situation will have a major impact on international relations. When a country so teeming with weapons collapses, the collective security of people all over the world will be exposed to the consequences.

China’s resurgence

China has become the world’s leading producer. It sells most of the world’s mass consumer goods. Its production ranges from low-end items to the most advanced science and technology. It has also taken its place at the forefront of humanity’s technical achievements. It is capable of launching ‘illumination satellites’, sending a robot to the far side of the Moon, building and maintaining a permanent space station orbiting the planet, and creating artificial intelligence. A habitual ‘Western’ arrogance and even racism makes boorish types scorn the importance of the Chinese contribution to human civilisation in general. The first cradle of rising population numbers, China was the birthplace of most of the inventions later considered decisive in Europe. Printing, gunpowder, paper money, hydraulic systems and the professionalised state administration all first began in China. As far as production is concerned, China is in fact regaining the position it held in the past. Up until the nineteenth century, China had the world’s highest GDP. Before Europe’s shameful aggression forced China into the trade in drugs, no one in Europe had ever spoken of China’s power as a problem. Now, after decades of mutually beneficial

cooperation, the United States and its NATO allies miss no opportunity to escalate tensions with China. Simplistic and irresponsible propaganda, orchestrated from one G7 meeting to the next, points the finger at the Chinese giant and seeks to isolate it diplomatically. US leaders have taken a confrontational line since the Trump presidency. And, under President Biden, they are sticking to this line with no shame or nuance. There is talk of a new Cold War. In truth, this is quite a reassuring comparison: never was the world so under control, down to the last corner, as it was in the days of the last Cold War. There is no comparison between a declining great power like the United States, the Chinese giant with its apparent will to self-sufficiency, and a stagnant, ageing, tired province like Europe, which has no plan for what comes next. The expected rise of Africa remains almost unthought of, even by actors on that continent. But all in all, it is clear that a new world order is being built.

Between bluster and reality

Naturally, this US attitude involves a certain amount of bluster and well-staged gesticulations. Informed observers know what its real limits are. But aggression and an archaic military threat do remain part of the arsenal of the old-world domination. These tools have no realistic outlet. In any case, since its defeat in Korea and then in Vietnam, the United States has lost every war it has started. The only serious contest left is over nuclear weapons. Still, we can qualify even this point by considering how their impact differs according to the size of the population and the size of the enemy's territory, as well as the various response capacities. And we all know that such a weapon is mutually destructive for the belligerent powers – and devastating for the rest of the world too. There are enough nuclear weapons stocks to destroy the planet twelve times over.[4] Is this really so realistic? That is eleven worlds too many. But, obviously, nuclear weapons carry the risk not only of an unlikely unforeseen use, but also and even

more so of an accident at some point in the chain of production, storage or transport. UN secretary general António Guterres warned in August 2022 that the world had entered ‘a time of nuclear danger not seen since the height of the Cold War’.[5] Be that as it may, the global balance of power remains overwhelmingly dominated by NATO and the United States. The United States alone accounts for 40 per cent of global military spending.[6] This proportion rises to 50 per cent if we include the United States’ NATO helpers. It also has 800 bases outside its territory and eleven aircraft carriers at its disposal. The second most tooled-up nation has just three.

The newcomers

A problem of the rich

Today the world’s leading producer, China, is – deliberately or not – fundamentally changing the existing order of things. It is better to admit this new reality and deal with it honestly, rather than engage in dangerous escalation. With all the trade coming in and out of its ports, the South China Sea has become the equivalent of the Mediterranean for the Europeans of past eras. Chinese coffers are today key to global financial flows. To be able to supply its production chains, it has to extend its networks of influence, its loans and its infrastructure, in all directions. Then one thing leads to another. And this is undoubtedly the point of greatest tension with the United States. When everything is a transaction, the most important thing is the means of realising them: in other words, the means of payment, the currency with which payment is made. This is not a neutral or apolitical object. Today, everything is paid for in US dollars. The leading players in international trade are therefore the ones who have the most dollars. This is also true of China. Once a certain volume of money has been accumulated,

what can be done with it? The simplest thing to do is to buy up more of whatever is bound to yield more money, however little that might be. China has bought up record-breaking volumes of securities from Uncle Sam. For years, it has been the biggest investor in US Treasury bonds. It has accumulated a vast stock of them. This also links the fate of the Chinese to the value of this mass of dollars. But they can hardly find this reassuring. Not only because they have no control over this value, but also because the United States' extraterritoriality laws punish those who use dollars in forbidden locations. So we can see the Chinese pulling back from this situation and gradually selling off their dollars. But they cannot do so too quickly, without running the risk of pitching the whole system into collapse. Before them, the Russians had slowly but completely divested themselves of their dollar reserves. But not in the same quantities. Today, no one knows where Beijing really stands on this issue. But the subject is on the table, and it is not only a matter of the relations between the United States and China.

De-dollarising the world

The absolute Achilles heel of US power is also where its greatest power lies, namely in its currency. There is a rule that applies to every country on Earth: currency has a material counterpart. On an international scale, it used to be gold, the material value that has always been there and is always in demand whenever a banking or currency crisis hits. Until 10 August 1971, the United States had to guarantee a certain quantity of gold in exchange for each dollar. But on that day, US president Richard Nixon declared the end of this guarantee. The dollar is worth what the market says it is, based on actual demand. In fact, everyone needs it. Some 80 per cent of international trade is conducted in dollars.[7] The United States can therefore finance itself at will by printing money. Its Treasury bills are always snapped up. Most importantly, its currency continues to be bought to pay for international trade transactions. This is especially true of the world's number one

commodity flow: oil and raw materials. The United States can thus issue as many dollars as it pleases to pay its bills. This is a staggering privilege – and a totally effective one. It is in nobody's interest to have a problem with the same currency that everyone needs large quantities of to pay for their purchases around the world. US governments have access at will to the world's reserve currency – and this allows them to finance trade deficits with the entire planet.

In any case, the de-dollarisation of trade is a subject of discussion all around the world. It is already the rule in many bilateral exchanges. Saudi Arabia has publicly mooted this course of action. So has Kenya, demonstrating how far the United States' power of deterrence has been eroded. It's a question on everyone's minds. The temptation is to trade in national currencies. Russia and China are increasingly trading in their national currencies (especially the Chinese yuan). In fact, since 2014, the dollar's share of their trade has already fallen by 50 per cent. In 2023, Russia and China agreed to adopt the yuan as their currency of exchange. At the same time, China signed a bilateral agreement with Brazil to facilitate trade using their respective national currencies. Since the year 2000, the dollar share of global central bank reserves has fallen from 71 to 59 per cent. Since 2014, it has been falling at a rate of one percentage point a year. This is the start of a worldwide geopolitical turnaround, and it's happening fast.

The strength of newcomers

Today, quite obviously, everything is provisional and in flux. But there are also underlying forces shaping this moment. The United States has been thoroughly destabilised in Latin America, which has always been seen as its 'backyard'. China's economic presence there is now well established. It is seen everywhere as a balancing power – to counterbalance the relationship with the United States. The shift towards the Pacific is well underway. The

commitment of Luiz Inácio Lula da Silva's Brazil, the world's sixth-largest economy, to the BRICS system (Brazil, Russia, India, China and South Africa) marks this grouping's return to centre stage. After announcing their desire to de-dollarise, nearly twenty countries have said they want to join the BRICS. Brazil is now pushing for the BRICS to put an end to dollar domination and develop a new currency of their own. The decision to do so was announced in August 2023. This group represents 31.5 per cent of the current global economy.[8] For comparison's sake, the G7 – thirty years ago the dominant powers – accounts for only 31 per cent of this total. At the beginning of the twentieth century, Europe and the United States, together with Japan, Australia and South Korea, accounted for around 80 per cent of the world's wealth and trade. This is too violent a reality to ignore.

The BRICS bank

The BRICS's New Development Bank (NDB), founded in 2014, aims to finance infrastructure and sustainable development in emerging markets and developing countries. Its activity remains at a modest level. But this also opens a window out of a world in which the old imperial powers still set the rules. President Lula summed it up in April 2022, when former Brazilian president Dilma Rousseff was elected to head the NDB: 'For the first time, a development bank with a global reach is established without participation of developed countries … [one] free, therefore, from the shackles of conditionalities imposed by traditional institutions on emerging economies. And more: with the possibility of financing projects in local currency.' In her inaugural speech as the bank's president in March 2023, Dilma Rousseff announced that henceforth one-third of loans would be in local currencies.[9] Today, there is a minimum of 22 per cent in local currency. The United States has been able to live on credit, through its unlimited issuing of dollars, but this artificial situation has now reached the end of the road. For, today, more and more question marks are being raised over the dollarisation

of international trade. But even if we recognise the exorbitant privilege that the United States enjoys, we also need to ask how it can be ended in a reasonable way that does not trigger instant hyperinflation? It would surely be in nobody's interest for the dollar pyramid to collapse: this would mean total chaos in the global financial system. If de-dollarisation is inevitable, then it is vital that the world economy should negotiate this moment collectively, as we did after the world wars, and without waiting for another such conflict to happen. China has so far been unsuccessful in its call for the creation of a common global currency based on the United Nations. This common currency would be used solely for international trade. It would stabilise exchange rates between national currencies without giving any country an exorbitant advantage. This idea had already been tabled in 1944, towards the end of the Second World War, at the time of the Bretton Woods agreements. John Maynard Keynes called for the creation of a common world currency, the 'bancor', to replace the dollar. In any case, this will surely be a key issue if the rules that the world runs by are reorganised for this new century. Indeed, this must be a crucial focus for any consideration of how to finance the change of direction that now needs taking: the ecological reorganisation of the mode of production. It is, likewise, crucial for coping with the financing needs necessary to confront the new climatic landscape.

Mistrust

Whenever the United States decides to impose sanctions on some other country, this choice always has its uncritical cheerleaders. Yet the sanctions imposed on Russia over the invasion of Ukraine seem mostly to have hurt those who imposed them. People are aware of this. Throughout the world, a certain mistrust has taken root – and there is ever less readiness to blindly follow the US's lead. Whatever majorities they can boast, the United Nations votes on sanctions against Russia did not bring together the

majority of the world's populations, as represented in the General Assembly. Is that cause for celebration? Once again, what is at stake here is the dominance of the dollar. And there are now many states who reject the political dependence that comes with having their assets in dollars. Indeed, such dependence also poses a threat: because of US extraterritoriality laws, these assets could be vulnerable to sanctions if such and such a state enters into conflict with the choices made in Washington. That's not to mention the possibility that the accounts of various levels of leaders could be frozen or seized, as has indeed happened on multiple occasions. There are no limits in this regard. The notion of the extraterritoriality of US laws can be extended very far indeed. Anyone, regardless of their nationality or country of residence, who uses dollars or US technology is liable to prosecution under US law. Even France learned this the hard way, when one of its biggest banks – one whose survival or collapse is also a problem for the wider global banking system – was heavily fined by the United States. It was punished for non-compliance with an embargo imposed unilaterally by the United States. This was not the only such case. Other French and European banks have had the same experience. France also had a nasty surprise when the US imposed an embargo on its military supplies. It had not voted for the second Iraq War, which the United States stupidly decided to embark upon in 2003. As punishment for this, it was denied the replenishment of the parts needed to operate the catapult launch system on the *Charles de Gaulle* aircraft carrier. So we may reasonably have some doubts about such a 'partner and friend' as the United States. Today, no one can do anything about such conduct. Generally speaking, it is difficult to act against a dominant power if it is not balanced by some counterweight. This is also why, during the Cold War, the balances were more favourable. Hence, many countries see China as such a counterweight. Its position forces it to behave differently, as long as it is in a balancing act with the United States. Everywhere I have been in Latin America or Africa, I have

heard this argument being made. But is it reasonable for our independence to be so totally reliant on the balance among other powers? Would it not be better to build collective leverage by coming together for common global causes – and isolating and shutting off the will to hegemony wherever that might come from?

The dead end of competition

The twentieth century that emerged from the First World War lay great emphasis on both military power and regional agreements between states. The idea was that building up this strength would avert the need to use it. It is the famous, dismal, claim that 'if you want peace, you should prepare for war.' The gradual integration of the European Union appeared to provide a compelling example of this. This way of thinking is closely linked to the introduction of neoliberal policies: in the name of expanding markets, economies are reformatted on a regional scale. It is supposed that eventually human needs will be met by an abundant, cheap and high-quality supply, provided by the winners of free and undistorted competition. This vision comes along with a whole world of values. One key value is a will to power which we are each said to have. In this vision, competition is the sole possible means of achieving this ambition: a barely civilised variant of the gunboat diplomacy of the nineteenth century. Yet nothing could be more inappropriate in a century in which we have to collectively deal with climate change and the dispossession of entire populations. The rivalry over markets is senseless. Here I will not delve any further into the damage being done to human civilisation by the commodification of everything and the destruction of states and public services. I will simply outline the context in which peoples now find themselves. The dominant approach must be opposed point by point, marking out a new field using words of our own, and without allowing our opponents to misappropriate them. We have seen too often how our opponents devalue words by abusing them or

discrediting them through a failure to act. We saw this when Emmanuel Macron took up the concept of ecological planning. He even created a planning commission, which began with grand claims but produced no action or results. Then the president put the prime minister herself in charge of this commission, though this did not make it any more consequential. That's how you kill words – and the things they are supposed to stand for.

The fight over words

The neoliberal and collectivist logics of international relations are expressed in diametrically opposed concepts of action. Neoliberals make free and undistorted competition into the highest of legal norms, while collectivists put cooperation at the top of the tree. Competition sharpens the struggle over the supply of goods. Cooperation imposes an equal duty to meet human needs. Neoliberals accept solidarity as long as it does not interfere with competition. Collectivists accept competition as long as it does not compromise the duties of solidarity. Neoliberal diplomacy undermines or prevents laws and regulations, in order to grant the markets the dominant say. For them, everything can be transformed into commodities. Collectivists set limits to markets' field of operations and prioritise the collective handling of common goods and resources. Neoliberals give markets and shareholders absolute rights that come before any other will expressed by society. Collectivists rely on the energy and expertise of citizens. For them, this is popular sovereignty – the basis of all authority. For them, no property is anything other than a 'right of use' governed by rules that are chosen by human beings, as is also the case for all other freedoms. Neoliberals organise a global market without limiting the rights of the strongest. Collectivists organise communities based on the general human interest.

Towards an alter-globalisation

What is power for?

The will to power is something truly poisonous. It always implies the ability to coerce. It therefore implicitly relies on violence as a guarantee. For collectivists, this can hardly be an end in itself. What do we want to guarantee, by building our forces? Our freedom. This applies to peoples and individuals alike. What other means can this freedom rely on, if not on sovereignty? This means, in other words, having both the right and the means to decide what best suits us, and the concrete possibility of making it a reality. The conditions of sovereignty are not coercion or intimidation, but the cooperation of those whose actions make this sovereignty possible. Its preconditions are not constraint and intimidation but sociability and reciprocity. These preconditions overlap with sovereignty in every regard. The easiest way of achieving sovereignty is the offer of cooperation. In a globalised society in the age of mass television audiences, the threat of using force can never prove or achieve anything other than heightening tensions.

In these conditions, diplomatic activity may head in two distinct directions. One is about the organisation of the relations of a particular nation. The other is about taking part in building a global arena dedicated to the general interest. Pursuing an alter-globalist diplomacy surely does not remove the need for diplomatic ties with our neighbours. In any scenario, diplomacy is the organ that regulates a country’s contacts with its partners, its potential adversaries, international institutions and the rest of the world in general. It is a skilled professional activity. It goes without saying that this function cannot be abandoned. But the alter-globalist diplomatic strategy has to enter into a different sphere of action. It must concentrate on causes of general human interest. By taking initiatives and sharing proposals, it uses all the available levers for building political cooperation.

Its outlet is the United Nations and everything that prepares the ground for UN interventions.

A strategy of common causes

So let us spell out what we are talking about here, point by point. It is about building an alternative to the form of globalisation that is today dominant, through a different policy and a different diplomacy. We can call this an alter-globalising diplomacy. Does it aim to put an end to the logic of rival powers and their threats of using force? Does it aim to put an end to the diplomacy of lowering customs duties, liberalising markets, reducing public services and opposing binding international rules? Achieving all that would surely be no mean feat.

First of all, we need an action strategy to convince people and bring them together. This strategy is built around common causes that serve a general interest. One would be the protection of Ukraine's nuclear power stations. Everyone benefits from that: not just the belligerents, but the rest of Europe and even beyond. This is also the starting point – however limited – for a logic that could bring a halt to the fighting. The force behind this strategy owes to the general nature of the problems that need tackling. The consequences of climate change–related disasters cannot be resolved within the limits of a single country. The consequences of this reality are playing out at a rapid pace. We see this, for instance, with regard to the absurd constraint posed by public debt, a major impediment which blocks initiatives where they are most needed, for example in parts of the world like Africa, where the demographic breakthrough is going to be the most powerful. At the global level, the total of all public and private debts amounts to over $300 trillion dollars: 350 per cent of the entire value of the world's annual production.[10] Clever phrases cannot mask the consequences of such a burden at a time when we urgently need to find the financial resources to ensure our collective survival.

The dangerous spiralling of military budgets around the world, and the abandonment of any programme for nuclear disarmament, further limit any room for mutual aid. Yet each of these questions has already become unavoidable, because they have to do with the several hundred million people who will be on the move between now and 2050. We are talking about 250 million climate migrants.[11] It is forecast that between 40 and 50 per cent of the world population will run short of water.[12] We cannot simply allow such challenges to run their course, without this having drastic consequences for everyone. If these migrants are pushed back to their lands of origin, then how exactly are their problems meant to be solved in the areas where they first emerged? How can we deal with the huge problem of millions of people leaving their regions, which have become unliveable because of climate change, without there being some global plan or regulation for their distribution? I am not going to list the problems or the solutions. The most important thing is to make people understand not only that these are intense problems, but even more so how inevitable they are. However vast the Mediterranean may be, and even after 30,000 deaths by drowning already, this sea cannot be an effective moat for Fortress Europe![13] Nothing will stop the immense masses of people driven to flee by the consequences of their abandonment to poverty, war and environmental despair. Borders large and small will trap decision-makers in fear and powerlessness. This will be the case as long as we are stuck with the world of ‘every man for himself’ and the law of the strongest. Amid the looming chaos it is hardly guaranteed that anyone will still be able to call themselves strong at all.

It has all started already

The international political scene is overloaded. Summits such as the G7, G20 and others are in fact narrow groupings whose existence itself produces hierarchical relations between nations. They systematically create

the atmosphere of a ‘board of directors’ purporting to lead the world’s affairs. They are compelled to produce a global ‘them and us’ in which they will finally assert their own dominance. To this end, they blacklist a series of other countries, deliberately creating tensions which this same grouping then claims to referee. This is the opposite of the United Nations system. At the very least, its selective composition runs counter to the need for broadly shared action.

Yet there is no shortage of examples of broad mobilisation for common causes that serve a general interest. They can always be found at the UN. Bolivia has proposed the creation of an international tribunal against environmental crimes and for the right to water to be codified as a fundamental human right. We have seen Ecuador and South Africa propose the creation of a monitored, binding mandate to compel multinationals to respect environmental and social rights. We have already seen the decision to keep the South Pole free from mining. We are already familiar with the series of global talks aimed at limiting the use of plastics or managing the use of the deep seabed.

Still, we are also familiar with the failure of international financial institutions to deal with the debt of countries that are over-indebted, poorly financed or under-equipped. However, many common causes have been identified that would serve a general human interest, and there are many frameworks in which these issues can be addressed. They can, therefore, also be integrated into a given nation’s diplomatic strategy towards its partners and used as a lever for shared action. This is the opposite of strategies pursuing the will to power. Of course, such endeavours also have to build up their own credibility, and an environment in which they can succeed.

The question of borders

For Europeans who have been at peace for over seven decades, the question of redrawing borders seemed rather outlandish until the Russian invasion of Ukraine. The partitions of Czechoslovakia and Yugoslavia were quickly forgotten, as was the creation of Kosovo by force. However, attentive observers were quick to spot the divergent behaviour of the French and the Germans in this context, indeed following lines of division that showed a certain continuity with the belligerent alliances of the early twentieth century. I say this to underline the existence of a long history at work in international reality. When it came to Catalan independence, the violent response from the European institutions showed the instant tension triggered by this type of situation. We can bet on a different attitude to Scotland and Northern Ireland following Brexit. So the question is coming back into play. Generally speaking, Europe's internal borders are being called into question in many countries by movements for independence or 're-attachment' to some existing state. This is the case in Spain, the United Kingdom and Belgium. On another front are the much less visible but no less determined resurgences of older ambitions in the east of the Old Continent. For example, in the vicinity of Poland. There, Russians, Ukrainians and Lithuanians have long been seen just as badly as the Germans, in relation to certain adjoining territories. The same goes for Hungary. Even in the government discourse there, there are negative references to the treaty signed at the end of the First World War, and official concerns about Hungarian minorities in some seven neighbouring countries. Here, I am talking about Europe's internal borders because two world wars were triggered by the quarrels on this continent. Of course, these wars then spread through all the fields of confrontation between powers and all manner of other territorial disputes. Conflict still has this ability to spiral. In the Americas, Asia and Africa, conflicts over the use of water or access to the sea, for instance, provide a highly flammable raw material. These are going to become hot topics. No matter what anyone says, borders are still

an issue. And on this subject, prevention is always better than looking for a cure.

Bad memories

The first condition for a new policy is that we abandon the will to power that uses the pretext of restraining some other power. The strategy built around common causes can hardly have much credibility if we also continue to belong to an offensive military alliance like NATO. This is above all true because NATO is first a system of internal vassalisation of the parties involved, and an expansionist project serving US power. We have seen this in Europe itself. The aggressive handling of the situation following the collapse of the USSR showed how the great-power logic kept alive a permanent escalation. Such a logic prevents regional situations from developing peacefully. Yet a commitment had been made to the last Soviet authorities that NATO would not be deployed into the area of the former Warsaw Pact military alliance between communist countries. No aspect of this agreement was honoured, even with regard to the transition in East Germany – a territory simply annexed by the West, despite the West German Constitution's own provisions in this regard. The opportunity for Russia to rejoin Europe was deliberately sabotaged. The deployment of US military alliances follows the same brutal course everywhere. And it pays. We see this with the return of warfare on European soil, and the practices of total war today being rolled out in Ukraine. But the more profound – and enduring – consequence is continental decoupling between the Atlantic and the Urals that began with economic sanctions and the destruction of the Nord Stream gas pipeline. Why start again with the absurd formation of a new anti-China alliance?

AUKUS

The Atlanticist line now rules the roost everywhere in Europe. It includes a greater or lesser number of diplomats who are aligned on principle not only with the wishes of the United States, but more specifically with the neoconservative wing of that country's politics. This positioning has become even more unrealistic since the AUKUS affair.

This pact between Australia, the United Kingdom and the United States, so named after the three countries, prompted the termination of Australia's contract with France for the construction and supply of conventional military submarines. This contract had been a sign of Australia's desire to be independent of the United States by having the means to act separately from Washington's authority. These three countries secretly negotiated for eighteen months before concluding a political agreement for a military alliance on 15 September 2021. Its aim is to 'protect the interests of the three states in the Pacific Ocean'. In other words, to deploy military resources against China's, though this country is acting in its own geographical space. In an unfortunate precedent, the United States equipped the Australians with submarines instead of the French. But this time they are nuclear-powered vessels. A clear message was sent and received: the US administration was now open to supplying nuclear technologies to non-nuclear countries. But the main event was the expulsion of the French, though France is present in the Pacific with the overseas territories of French Polynesia and New Caledonia. The failure of the alliance dreamed of by President Macron shows the real nature of the relations that the United States builds. It can only accept vassals.

Naturally, this situation is ultimately positive for the French, as it keeps them out of an absurd confrontation with the Chinese. The French president then declared himself 'equidistant between the United States and China'. Even beyond the fact that this in no way reflects his wider behaviour, the phrase is particularly ill-judged. If a conflict did break out, how could we imagine simply remaining 'equidistant' between the protagonists involved

in this area? Neutrality is not an alter-globalist option. That would mean indifference to the actual fault and responsibilities involved in a potential conflict. It offers a pure and simple blank cheque to the logic of power. Non-alignment must not mean neutrality, but the determination to hold to consistent principles in international relations, rather than condemnations that obey the logic of ever-shifting double standards. Non-alignment expresses a desire for the independence of those who choose this stance. This is not a means of isolation or withdrawing into our own national box, but a path of cooperation genuinely open to all.

After omnipotence

For any country, especially one in a dominant position, omnipotence is an attractive proposition – and none of them is likely to reject it out of choice. We could say the same of most human beings. But there is also a decisive difference between the two situations. No human being sets their own laws. The existence of shared rules makes us part of a society. We may assume that if these rules are discussed and decided in a collective way, then they will be better respected. This also allows for these rules to be changed in a calmer and more prudent way. The same applies to the rules that govern nations. Having shared rules allows them to be at peace. The United Nations system is the cornerstone of a peaceful humanity. This will be especially needed when we have over 10 billion people, more than one-third of them in ecological distress and facing hunger and drought. This is why we need to revisit the concepts inherited from the last century. Outer space and the sea – the new areas of expansion for a growing humanity – provide a concrete basis for this innovation, and good means of achieving it.

14

Humanity’s New Frontiers

A nomadic species

Our species is forever spreading: indeed, it is a trend that dates back to humanity’s very origins. When humanity reaches earthly limits, it tries to go beyond them. It invades, it occupies, it appropriates. This expansion goes hand in hand with population growth. There is no stopping it. Today, we have names for humanity’s geographical limits: the sea and outer space. This also makes them into decisive focuses for the diplomacy that will shape the new world ahead of us.

Today, we have the chance to start building a different world, by creating international law that serves the general human interest. In this chapter, I want to tackle the questions posed by these two fields of human expansion. In so doing, I have tried to respond not from the viewpoint of France’s own material interests but in terms of the contribution that it might make to the rise of a single ‘human people’. Again, this will have to centre on common causes that unite humanity.

Of course, our species’ vast numbers are now firmly rooted in the soil of sedentary life. But humanity’s inevitable expansion demands that we think about a new nomadism. Now is just the right time to imagine it, as we see

the errors of the violent conquerors of the past start to dismally repeat themselves.

Space

Go and see who's up there!

The first man in space did not have a zip on his spacesuit's trousers. It makes his achievement even more admirable. As the number of humans reached 3 billion, Soviet cosmonaut Yuri Gagarin became the first one of them to orbit the planet, for some 108 minutes. Without peeing. He must have done it before he set off, on the back wheel of the bus. Since then, all Russian cosmonauts have had to stop for a pee, out of superstition. It was 12 April 1962. Gagarin returned to Earth, got out of his spaceship and met two people in a field: 'Don't be afraid,' he said to reassure them. 'I've just come back from space.' Today, there are all manner of human missions into the boundless universe. With their James Webb Space Telescope at the Kourou spaceport in French Guiana, humans are seeing the universe as they have never seen it before. In the past, there are the fossil lights of the world's beginnings, and in the present, the distant horizons where the telescope has detected a galactic collision brighter than a trillion suns, and so many other wonders. But things are already getting worse.

We can say the same about the sea. In the distant past, it confined and separated. Then, one fine day, we set out by boat for the first time. Much later, in the first century of the Christian era, Seneca wrote a poem about this moment, to describe how important it was for human history:

> Too venturesome the man who in frail barque first cleft the treacherous seas and, with one last look behind him at the well-known shore, trusted his life to the fickle winds; who, ploughing the waters on an unknown course, could trust to a slender plank, stretching too slight a boundary between the ways of life and death … Now, in our time, the deep has ceased

> resistance and submits utterly to law; no famous Argo, framed by a Pallas' hand, with princes to man its oars, is sought for; any little craft now wanders at will upon the deep. All bounds have been removed, cities have set their walls in new lands, and the world, now passable throughout, has left nothing where it once had place: the Indian drinks of the cold Arazes, the Persians quaff the Elbe and the Rhine. There will come an age in the far-off years when Ocean shall unloose the bonds of things, when the whole broad earth shall be revealed.[1]

That time has now come.

Beyond borders

France's first space defence exercise took place on Monday, 8 March 2021, in partnership with the United States and Germany, among others. The space age has thus arrived in the age of warfare, without this issue having ever troubled domestic political debate in France or anywhere else. Space remains the great unknown of democracy. Yet space exploration has already had multiple effects, for instance in the fields of medical imaging and materials science. Just think about the other now widespread consequences of space travel, including modern computers. Or new services such as mobile telephones, weather forecasting, GPS navigation and thousands of other everyday applications.

But what about states' policy on outer space? They surely do have one. So far, this has taken the form of international treaties. These documents express the quite remarkable understanding that there is one humanity and that the universe should not belong to anyone in particular. The occupation of space has long been governed by rules laid down in the Outer Space Treaty signed in 1967. This international agreement established the principles of space exploration. The first of these is that it grants freedom of access to the various states. Outer space is a borderless domain: any state can go wherever it wants, as long as it has the technological capacity to do so. Second, the treaty establishes the principle that everything in space, including natural resources and the stars, are *res nullius*. This means that

they belong to no one; they are a territory without a master. ‘Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means,’ the treaty proclaims. Finally, and perhaps most importantly, it demilitarizes outer space, as it bans the deployment of nuclear weapons or weapons of mass destruction in Earth’s orbit. It outlaws any use of celestial bodies for military purposes.

The race to privatise

These principles make everything beyond Earth’s atmosphere a common good. But today, these principles are being undermined. As far back as 1979, the Moon Treaty reasserted the principle of non-appropriation and included the Moon in the ‘common heritage of mankind’. But this document has never been ratified by the United States, Russia, China or France. Since then, of course, the lure of profit and the neoliberal vision of the world have taken their toll. Here again, the United States is waiting in ambush, as it always is when it comes to making money. In 2015, the US Congress unilaterally broke the 1967 treaty for the first time when it passed the Space Act. Under this law, it authorises private US firms to explore, extract and sell resources from outer space. So long, *res nullius!* This decision gives companies like billionaire Elon Musk’s SpaceX the right to own resources if they extract them from space with their satellites. This opened up a worrying breach for others to rush into as well. Two years later, the United States was followed by … Luxembourg. The Grand Duchy of tax cheating adopted new regulations in 2017 to authorise mining companies based on Luxembourg’s territory to exploit space resources. This was quite a promise. Various unsavoury firms became interested in locating their operations in this haven, where their looting of outer space would be protected. Several private companies have already joined the space race, led by Elon Musk. But most of his funding comes from his contracts with

NASA. As the Americans see it, outer space must not be allowed to be taken over by the state, even if that means their own one.

Quite a market!

In 2020, the United States continued its conquest of space, as it proposed the Artemis Accords. Naturally, it did this in the name of the most pacifist concerns. The agreements were supposed to specify the principles governing states' activities in exploring and using space. The tone is comforting. We are told that the aim is to create 'security zones' to 'avoid harmful interference'. In reality, the aim is to provide military protection for resources once they have been monopolised. Once this has happened, they can be 'protected' (by military means) in order to avoid disputes. The creation of these 'security zones' allows the appropriation of vast areas in the interest of capturing their resources. Sometimes, this is to the detriment of later arrivals, as in the case of lunar water. In November 2021, French president Macron decided to sign up to the Artemis Accords. There was no parliamentary vote to ratify this choice. There were, of course, commercial reasons for this hurried move: asteroids are rich in gold, iron, nickel and many other rare metals.

Europe's space industry faces increasing international competition. There are more institutional and commercial forces in space than ever before. New private sector players from Silicon Valley, the Big Five and Wall Street have developed their space activities by adopting the methods of the digital industry. As a result, low-Earth orbits are saturated with constellations of thousands of low-cost 'mini-satellites', subject to planned obsolescence. SpaceX has even organised manned tourist flights. In 2021, Elon Musk's firm sent four 'tourists' into space for three days, including Jeff Bezos, the richest man on Earth at the time. They each emitted more CO_2 in ten minutes than the poorest billion humans would do in a whole

lifetime.[2] This is the New Space vision, in which privatisation, capitalist entrepreneurship, greed and ostentatious vanity are paramount.

Star wars

That is not all. As well as commercialising space, the United States and other major powers are also militarising it. Despite the 1967 treaty, over the last decade we have seen a real arms race starting to take off in outer space. On 27 March 2019, India demonstrated its ability to shoot down a satellite in low orbit with a missile fired from Earth. Three other states are also capable of doing this: China, Russia and the United States. Still, this technology is rather dangerous for the state that opts to use it, since it causes debris that may damage its own equipment in orbit. In recent years, we have also noticed the presence of small hostile objects around space installations essential to the armed forces, such as the satellites used for telecommunications or mapping. In 2016, French military leaders declared that the United States, China and Russia had such capabilities. In 2018, the United States created an army corps for outer space. In France, a space command has existed since 3 September 2019. By publicly organising a presence in this field, France is accepting that space is a battlefield in its own right. No sooner said than done. In February 2021, a NATO centre of excellence for outer space was established in Toulouse. A few months later, Russia destroyed one of its satellites with a missile fired from Earth. The message was clear: the arms race in space has begun.

Skies full of rubbish

The organisers of this commercial and arms race are threatening the future use of space. Flying in the low orbit of our shared space are nearly 40,000 pieces of debris measuring over ten centimetres across, more than a million measuring less than that and more than 300 million measuring less than one

centimetre. These are all potential sources of collisions, some of which could prove catastrophic. In 2007, the destruction of a Chinese satellite by a deliberate missile strike was alone enough to produce a 30 per cent increase in space pollution, due to all the resulting micro-debris.[3] In 2018, the European Space Agency organised twenty-eight manoeuvres to avoid space debris.

The Starlink mega-constellation – SpaceX's satellite-based broadband Internet offering – plans to send 42,000 spacecraft beyond our atmosphere, including 12,000 in constant orbit. Since 2019, the number of satellites in space has more than doubled as a result of Elon Musk's project. This proliferation of satellites in orbit is also seriously disrupting observations by ground-based telescopes and may indeed threaten the future of this activity. Satellites reflecting the sun's light increase the effects of light pollution – a major problem for the observation of certain rare astrophysical phenomena such as the passage of a meteorite, which requires a totally clear sky. The effect is that the brilliance of the sky is set to increase over the next decade. So the privatisation and exploitation of outer space are – quite knowingly – making it ever more polluted. The ravaging of the Earth is being reproduced on the outskirts of the planet too. Today the rule is an extractivism without limits, built on the appropriation of common goods and the disorderly exploitation of investments without any social use.

Space cooperation

The next chapter in humanity's adventure in outer space is now being written. Will we be able to remember the failures of the past, and avoid repeating them? We have already seen an age of exploration which sought only conquest, and the devastation of natural and cultural resources wherever force of arms triumphed. All this left too many marks for us to forget the causes. Conquest is always colonisation. This is worth bearing in mind, at a time when humanity's stomping ground is again being expanded.

This time, we need to be able to think of humanity as a collective actor in history. We need to set out a project that offers desirable – common – horizons. Not everything is in the hands of the hyper-powers. France is also a space power. It has the world's second-largest budget for space exploration per head of population. The Ariane rocket is the most reliable satellite launcher on the market, and France has the world's third-largest spaceport on its soil, in Kourou. It has the potential to harness this power for a proactive policy: to promote humanity's expansion into outer space as a common good, centred on cooperation, science and the peaceful exploration of the universe. So why not do it?

Africa must get involved

Today, less than 2 per cent of all active satellites in Earth orbit belong to African countries.[4] While eleven African countries have satellites in orbit, only one – Nigeria – can claim the ability to build one from scratch. By examining the possible focuses of outer space activities, we understand the scope of possible research, and the many kinds of intellectual and material expertise that can be pooled. All this is within reach, and we have a duty to do it within this century. In any case, Africa cannot allow itself to be robbed of the century of space, having already been robbed of three centuries of development by slavery, colonisation, the Cold War and neoliberalism. Establishing a common university would provide a vehicle for cooperation – one of a kind finally free of the will to appropriation, exploitation or commodification that we see today.

Space and common goods

Space is a key force for responding to the ecological challenge. It is a common good which, when placed in the hands of researchers, can help protect all other such goods. For instance, the Argos satellite system allows

us to track the impact of global warming, anticipate environmental risks, establish sustainable development strategies and monitor the evolution of terrestrial and marine species. With plastic pollution of the oceans set to quadruple by 2050, satellites allow us to track plastics from space, predicting how they will be moved by ocean currents.[5] Satellites are, indeed, essential for studying and protecting important common goods and resources. There are many such examples. One is the water cycle. In October 2018, France's National Space Studies Centre (CNES) launched the Venus nanosatellite. It is intended to monitor changes in vegetation at more than a hundred sites, in order to build water management models in dry areas and prevent forest fires. Since the end of 2022, the SWOT satellite operated by CNES and NASA has been mapping virtually all the Earth's surface water. In particular, this mission is meant to provide the information needed to manage this resource by measuring the quantity and variability of the planet's stock of fresh water. At the end of its mission, the satellite will be the first to re-enter the atmosphere under controlled conditions, as French law has required of all space operations since 2008. In 2021, UNOSAT officially became the United Nations Satellite Centre. Its mission is to collect geospatial information to help deal with climatic disasters by studying sustainable development policies. Using satellite data and AI, the centre is developing a capacity for disaster-risk reduction, environmental protection studies and food security in the Africa and Asia-Pacific regions. This is working in the right direction: common research in order to manage common goods and prevent common disasters.

The sea

Seen from the shore

On this planet, shores have long been limits. But 70 per cent of the Earth's territory stands beyond the shores; that is, in the sea. Vast numbers of Earth's population live by the shore, and this will be even truer in 2050, when the total number of human beings reaches 10 billion. Already today, over 20 per cent of the world's population lives less than twenty miles from the sea.[6] In 2015, more than 60 per cent of the world's population lived in the 'great coastal zone'; that is, less than 250 miles from the shore. Demographic projections predict that, by 2035, more than three-quarters of humanity will be concentrated in these same regions. As the number of humans grows, they are bound to spread into the available and still virtually unoccupied maritime space. Whatever the starting point for thinking about changes in the world today or in the near future, the sea is a key planetary issue. A series of explosive events for all humanity is playing out offshore. All this should give rise to just as many global discussions about what is going on.

Out to sea

We have made our way out to sea in every possible way – and with largely damaging consequences. This expansion began in the neoliberal, productivist mode typical of our time, commanded by greed. The plundering of the sea is already well underway, through a combination of irresponsibility towards the environment and a more particularly social violence. We see this, for example, when more than half the fish caught at sea and eaten in Europe comes from fish stocks in poor countries.[7] The European Union buys and hoards everything, to the detriment of local populations who are then forced to move to the cities or else to emigrate. The boom in maritime traffic, as a result of the logic of outsourcing and offshoring, also comes at a cost. First is the cost of countless unauthorised discharges, and the deliberate scuttling of old cargo ships. All this is on an upward trend. For some 90 per cent of the world's trade moves by sea.[8] The

overloading of freight vessels is further reducing transport costs. Nothing could do more to fuel the great frenzy of the world's permanent relocation. This is already reaching fever pitch. In 2020, for the first time, researchers mapped and quantified the footprint that human construction has left on the oceans, as counted in bridges, oil and gas platforms, port and aquaculture infrastructure and submarine cables. According to their calculations, we are already occupying 12,000 square miles of the Earth's maritime space. That is not to mention the 100,000 or so cargo ships and other giants that ply the seas all year round. The real impact of the human presence on the marine biosphere is far greater still. Noise, chemical and plastic pollution extend from one end of the world's oceans to the other. Unsurprisingly, the sixth mass extinction event is also taking place at sea. All in all, a million animal and plant species are on the brink of extinction.[9] Scientists have drawn up an inventory of the natural environments destroyed or altered by human activities: 66 per cent of marine environments are affected.

Everything goes into the sea

The situation at sea is primarily the result of what is being done on land. The worst kind of damage is already with us, like the 12,000-square-mile dead zone off the Gulf of Mexico. Marine life there has completely disappeared, starved of oxygen by the pollution caused by agricultural chemicals flowing into the Gulf. In the West Indies, seaweed is drifting in from the coast of Brazil, where torrents of fertilisers flowing from the land into the sea are feeding the growth of these now out-of-control algae.

The spread of offshore oil and gas platforms is another product of land-based activities, stepping up our already outlandish dependence on fossil fuels. Here is one case in point. In 2022, even amid all the talk of a new green civilisation, Qatar joined forces with Total to develop the North Field East project: the world's largest natural gas field, spanning more than 3,700 square miles in the Persian Gulf, and around 10 per cent of known natural

gas reserves.[10] The aim is to enable this Gulf state to increase its LNG production by 60 per cent before 2027. Today, a series of increasingly irresponsible projects are being announced. One plans to drill at a depth of 3,000 metres, opposite Cape Horn – the most disturbed maritime area on Earth!

In the last decade, the Eastern Mediterranean has also seen drilling for gas and oil stepped up. First, this poses a major ecological risk for this sea, whose water takes a hundred years to replenish itself. Second, these activities around Cyprus are fuelling military tensions between Turkey and Greece. Offshore oil and gas drilling in the Mediterranean should be banned as quickly as possible. This virtually enclosed sea would not survive an accident comparable to the one that has so ruined the Gulf of Mexico.

Mare nostrum

The Romans referred to the Mediterranean as *mare nostrum,* 'our sea'. This body of water connects the 500 million people living along its shores, with four countries accounting for almost two-thirds of the total population: Egypt (109 million), Turkey (85 million), France (68 million) and Italy (59 million). It links them together, with both good and less good consequences. If nothing is done, this sea could contain more weight in plastic than fish by 2050.[11] It is already the most polluted sea. Yet nothing is being done to organise a joint plan to clean up the waste discharged by all the populations living on its shores. And we should not forget that some of Ukraine's nuclear reactors are cooled by waters that flow in rivers into the Black Sea and then into the Mediterranean. Such cooling is also used for some French reactors as well as a nuclear power station in Catalonia.

The Mediterranean is also the sea most exposed to the consequences of global warming – indeed, it is warming faster than other seas and oceans. It is already becoming tropical. Temperatures are rising. Cyclones and their torrential rains, usually confined to the tropics, are multiplying. Exotic

species are ever more abundant. A large part of the Mediterranean seabed is also covered by an underwater forest of seagrass called *Posidonia*. This forest stores five times more carbon than a tropical forest covering the same area of land.[12] In other words, it weighs heavily on the overall balance of the climate. Yet the 3,000 superyachts criss-crossing the Mediterranean are rapidly destroying the marine ecosystem. More than one-third of the Mediterranean population already lives directly on the shore. By 2030, 200 million of them will be living in over 1,600 seaside towns and cities. If things are not to turn out for the worst, we need to unite the Mediterranean space around common objectives for progress: de-pollution, protection of seagrasses and the development of renewable energies at sea. This is the key to saving our common sea; otherwise, all will be lost.

Marine treasure

The global ocean and the global disruption of the water cycle affect each and every one of us. Many forms of pollution in one place can come back elsewhere in the form of rain. So water is our foremost common challenge. It demands a new global ecological order and the development of binding international laws. An international treaty to protect the high seas has just been signed. It is far from perfect. But it is a seminal moment in shaping humanity's future at sea.

Beyond protecting the deep seas from the looting of their mineral and fossil resources, the next aim must be action on plastic. Made from oil, plastic has become the new El Dorado for fossil fuel multinationals. One tonne of plastic ends up in the ocean every three seconds! One and a half million animals die every year from ingesting plastic. The high seas have not been spared, either, as demonstrated by the emergence of the 'seventh continent', made up of the billions of pieces of plastic waste floating more than thirty metres under the surface.[13] But awareness of this problem is growing. There are hard-fought negotiations over a treaty to put an end to

plastic pollution. Once the deal is reached, it will need translating into a working plan based on three virtuous principles: recycling, de-pollution and finding biosourced and biodegradable alternatives. There is no lack of possible solutions. In March 2021, France's CNRS became the scientific lead for an international coalition for the development of algae-based packaging materials. This international coalition is also taking a close interest in the use of algae in pharmaceuticals and food. An unprecedented upheaval is now underway in humanity's relationship with the sea. Human beings certainly do need proteins – and the sea seems capable of meeting this need. We ought to be raising questions over our reliance on animal proteins. Algae could thus prove to be a valuable ally in more ways than one.

The water rises, the sea commands

Global warming is accelerating the melting of the polar ice caps. The South Pole is warming three times faster than the global average, and this also means that the water is rising. The IPCC warns that rising sea levels caused by global warming threaten some 10 per cent of the global population even in the short term.[14] Hundreds of cities are at risk. Ten of the twenty most endangered cities are in the Mediterranean. We can already see the tangible effects: as the coastline recedes, 126 municipalities in mainland France will have to change the way they occupy the shoreline. Emblematic in this regard is Le Signal housing block in Soulac-sur-Mer, south-western France. In 1967 it was built 200 metres from the Atlantic, but the site is now just twenty metres from the water. In 2023, the building was demolished, as the first such block in France to fall victim to coastal erosion. Thousands more will follow it.

But, clearly, this is also a global problem. Even if global warming is limited to + 1.5 degrees, almost 8 per cent of the world's population will be living in areas below sea level. That means 530 million people. If the

mercury rises by four degrees, some 14 per cent of the world population, or a billion people, will soon have the water around their ankles. In practical terms, this means that millions of people in the world's largest megacities will be forced to move: a quarter of the population of Rio de Janeiro, New York and Jakarta. But this would also mean half the inhabitants of Mumbai and three-quarters of people living in Shanghai. Anticipating that Jakarta will inevitably be engulfed, Indonesia has already undertaken to move its capital 1,200 miles away, to the island of Borneo.

This is all especially concerning given its combination with another threat. Are you familiar with subsidence? This technical term covers a rather chilling reality. Many coastal towns are subsiding under the weight of construction. Pumping groundwater to meet the needs of an ever-growing urban population is accelerating the process, at a rate five times faster than the rising water itself. Around thirty towns and cities are sinking at a rate of one centimetre a year. They need help!

You will always cherish the sea!

All the issues mentioned here ought to be top priority for the international community – and provide the basis for a new international maritime diplomacy. But, for the time being, the battle for maritime space continues to rage. In every country, there are the usual conflicts over sea use between fishermen and yacht owners, between wind farms and fishing zones, and so on. But the conflicts between nations are much harder-fought. Islets that were once ignored are now prized because of the promise of their maritime subsoil – and they are becoming the kind of claim that planes and warships get deployed for. The military tensions in the South China Sea are a leading case in point.

Out at sea, war is truly reaching the lowest depths imaginable. As we have seen, the bulk of the world's Internet, financial transactions and even the transmission of electricity between countries relies on undersea cables.

Protecting these thousands of miles of cable is now a vital issue. This is an urgent problem because this gigantic network is still growing. The length of submarine electricity cables is set to increase sevenfold by 2030. France is the main point of entry for many of these cables, on which all Europe relies. Countless pieces of data from our everyday lives travel through them: we rely on these cables for everything from banking information to connections to hospitals and airports, and even systems for monitoring drinking water. The war in the deep could have the most practical implications. It could prompt an Internet blackout, or even an energy or financial crisis. France announced last year that it was buying underwater surveillance drones and remote-controlled robots to protect its thirty or so mega-cables. This equipment is capable of diving to a depth of 6,000 metres. But here again, we are witnessing a militarisation of the undersea space. Sometimes this even shows a certain ingenuity: the Chinese have underwater drones in the shape of sharks, and the United States ones in the shape of manta rays and flying fish.

It is saddening that some nations whose continental shelf grants them a maritime presence nonetheless remain indifferent to the ocean's true potential. Are landlocked countries going to allow themselves to be squeezed out of this space, where so many of the resources of the future are to be found? How about when they see how their coast-facing neighbours are already taking full advantage? No policy for the long term makes sense unless it starts from this understanding. Ever since human beings first took up weapons – meaning since the beginning of our existence – geography has dictated politics. So every country ought to carefully consider its position regarding the sea. The human community as a whole must establish rules for shared access – and set limits on the right to use the sea's resources.

A comprehensive solution for energy at sea

One special focus of attention ought to be the sea's great potential for renewable energy production. Here, I am referring to the various means of producing electricity that exploit all the forms of energy present in and through the maritime space. These include tidal energy, wave energy, marine current energy and thermal energy from the seas. But there is also energy from algal biomass, energy linked to salinity gradients, solar energy at sea, not to mention offshore wind power. This last means of generating electricity has a limitless natural potential, especially if you add floating wind turbines, which are easier to install than the ones anchored at sea today.

Added to this is wave energy, whose potential is virtually unlimited. It is remarkably abundant: it offers 300 times the amount of energy needed on land! We also need to consider the benefit represented by these installations' capacity factor; that is, the share of the year during which they produce at full power. This far exceeds the comparable figure for onshore renewable energy installations: it stands at 40 to 45 per cent, compared with 25 per cent for photovoltaic solar power, for example.[15] That is not to mention nuclear power stations, which are increasingly being shut down because of ageing, manufacturing faults or drought. Most importantly, at sea everything can be bigger in scale, and this also has wider consequences. A wind turbine double the size produces eight times as much energy.

The theoretical energy potential of marine renewable energies is estimated at some 2 million terawatt hours (TWh) per year. This is a breathtaking figure: after all, global electricity consumption will barely approach 30,000 TWh in 2022. Yet marine renewable energies currently account for less than 1 per cent of the world's renewable energy production.[16]

Meanwhile, 81 per cent of our energy consumption comes from fossil fuels.[17] The sea really does have the solution to the Earth's problem: free, clean, permanent, renewable energy with no physical limits. In the

Mediterranean, we have a convergence of interests on this point. Underwater interconnections have already been established between the northern and southern shores. There is no lack of limitless sources: energy from the sun over Morocco, Algeria and Spain, osmotic energy from the Rhône delta and energy from the countless winds: the Mistral, the Tramontane, the Marin, the Poniente, the Sirocco and so on. Rather than fighting over new gas pipelines, we ought to be trading in renewables! Meeting this challenge should be one of the main objectives of an alter-globalising maritime diplomacy.

The Earth's poles

That's not to mention the Earth's poles. France is one of those nations that has territorial claims in Antarctica, and it also has a research station at the North Pole. As a fully-fledged 'polar' nation, France therefore has the means to make its voice heard in a way that is not aligned with capitalist productivism. French figures, notably 1988–91 prime minister Michel Rocard, worked to prevent the mining of Antarctica. The issue also arises at the North Pole. Gradual melting at the North Pole is opening up new shipping routes, and disputes have begun over who owns the seabed there. Obviously, any mining would only add to the destruction of the poles. So we have to take a firm stand: the poles should be the common property of mankind, dedicated to research and the expansion of knowledge. These are the terms of the Antarctic Treaty, which has been in force since 1961. It makes this continent a land of international cooperation, with eighty research bases dedicated 'to science and peace'. The fifty-four states who are party to this treaty would do well to remember this – and to draw inspiration from it to extend the same principles to the Arctic.

Another world is possible

France’s last two presidents have made out that this country is a junior ‘Western’ nation, and indeed they have slavishly integrated it into the policies of the US empire. But on this new world map, France is a power with a universal calling, with a maritime presence on all five continents. It can be a unifying and inclusive force along with the many nations on the continents that share its shores. There are many valuable fields to work together on, from universities to shipbuilding, observation stations, the conservation of protected areas and drilling bans. Is there anywhere else on Earth where the general human interest is so directly, immediately and visibly at stake? Because, more than ever, the future of humanity is playing out at sea. The role to be played there has yet to be devised. But what surely can be done is to build a strategy based on common causes, before the market takes over.

Conclusion: The Moral of History

The poverty of productivism

In the last century, the story of history's progress was built on the idea that it would pass through a series of stages of material development. These stages were fixed, predetermined and similar regardless of place, culture or past history. This story indicated a path from underdevelopment to the happiness of an efficient, democratic market economy. Various benchmarks were proposed along the way: the supposed results of material production. But the real criteria of success were not the spread of education, the status of women, literacy, human life expectancy, the fate of animals or even the quality or lifespan of the products that we use. For most branches of political thought, all these were just automatic by-products of growth and the flow of goods and money. Until the beginning of the new millennium, almost no political camp had taken stock of the inherent contradiction in this way of seeing things: its quest for infinite demand in a world of finite resources. This objection surely did gain traction in the human and physical sciences, but both right-wing politics and the traditional left shrugged their shoulders. But now the reality has become undeniable. The narrative of triumphant productivist modernity is dead. It has been replaced by nothing more than empty propaganda.

From quantitative to qualitative

Later in the century, another vision of the world was – at last – officially expressed. This came only after a long period of social struggle and reflection that began with the Club of Rome in the early 1970s. In 1987, the United Nations Development Programme (UNDP) published *Our Common Future,* the report by former Dutch prime minister Gro Harlem Brundtland.[1] Five years later, in 1992, the first Earth Summit was held in Rio de Janeiro, Brazil. Brundtland's report replaced quantitative assessments with a qualitative vision. It proposed new criteria of success: 'human development criteria', to be achieved within the framework of 'sustainable development'. Here, the benchmarks for evaluating government action changed. They still produced a ranking of the different nations' performance, but these were no longer based on growth and GDP. The quantitative dimension had to take a step back, in favour of an assessment of the qualitative progress in the human condition. Of course, it is now well understood that this discourse has limits of its own. But it did mark a step forwards in the mental universe of politics. In my own case, it prompted a break with a whole way of thinking – and offered an alternative to the traditional, entirely quantitative focus of the wing of the left to which I had belonged. I adopted this new approach in my first book, *À la conquête du chaos.*[2] Twenty years later, I called the programme on which I was running in the French presidential election *L'avenir en commun* ('Our Common Future'), echoing the title of the UNDP report. It was from there that I had deduced the idea of a general human interest. And no longer did I confuse this idea with the interests of the working class alone, or just with the development of the productive forces. Today, I see the expression 'in common' as extending the scope of this general interest to embrace all living things. After all, is not all life indivisibly linked by the need to halt the destruction driven by finance and productivism?

Another narrative of history is possible

Sometimes, a narrative of history on which we long relied becomes exhausted. Even if this is unbeknown to us, this also changes our relationship with the world. It forces us to reposition ourselves. We can find many past instances of this. The humanist thinkers of the Renaissance felt like they had been pitched into terra incognita when they learned of the existence of a continent unmentioned in the Bible. Worse still, on that continent there were people with no knowledge of Noah or the prophets. And yet, up to that point, everything from Adam and Eve to the final Apocalypse had seemed set out in writing – a narrative that also justified the political order of the time.

We face a similar challenge today. Those humanist thinkers had two centuries to work up the Declaration of the Rights of Man and of the Citizen, before the French Revolution of 1789 ushered in what the poet Goethe called ‘the modern era’. But today we are hemmed in by much shorter deadlines. The younger generation will show its own ability to mount the necessary uprisings and pave the way for a different history. It will leave those who build their haughty power on the market ridiculous and archaic, just like those who once ruled the feudal *ancien régime.* A new narrative will take shape together with the new reality to which their actions give rise. Of course, history will never come to an end, as long as there are at least a couple of human beings left. But the present moment is indeed the end of *a* world. It is the end of that world in which we were forced to live with suicidal ecological and social irresponsibility.

But what real reason is there to nurture such optimism? And is it enough to stir up our will to act? Looking at how things are right now, should we not instead conclude that all indicators point to collapse? Where can we find the energy to oppose this happening with all our might? It is true that the limits of the ecosystem’s resistance are being crossed, one after another. Climate change has begun – and it is irreversible. Yet nothing seems to be

able to stop the blindest form of capitalist productivism. Social and political violence against the many is spreading ever further. Similarly, nothing seems to be able to interrupt the calculations of the warmongers and *génocidaires*. So what now?

The truth is that reality never follows inevitable paths. The real world is a world of probabilities. However small the possibility of a positive outcome, what else can we do but act to help make it happen? Why should we do less for the human community than we would do for ourselves? We all know that we are doomed to die, eventually. And yet everyone strives every day to keep going, to improve their living conditions and those of the people around them, and sometimes even those of society as a whole. So life poses only one question: who can we help to build a different future?

Making a commitment

In all this, we do have a guiding principle: personal commitment. That means not relying on others to achieve the outcome you want. All you have to do is act according to this principle, without worrying about getting any reward. The self-centred liberal thinks that he is doing what is best for everyone by doing what is best for himself – and calls on everyone else to do the same. Such a perspective makes little practical sense. We cannot ignore the rest of the human community and its ways of organising itself. For me, this liberal-egoist mindset is itself extra cause for concern. It adds to the other harmful elements of the market society which we are forced to live in. Given the pressing – indeed, quite foreseeable – hardships ahead of us, this social egoism will hinder the solidarity and collectivism that we need to tackle the present situation.[3] A mass culture based on ‘every man for himself’ will weaken the overall resilience of the human community. More broadly, social inequalities, the various kinds of discrimination and

divisions driven by religious or racist hatred all undermine humans' ability to build solidarity. So these are all additional dangers. The new collectivism of our time requires, more than anything else, that we cultivate our collective reflection, deliberation and action.

A way of being human

But have you noticed? The high and mighty are no longer offering us any narrative on the bright future ahead of us. Gone are the steps towards happiness through growth, and a world in which we are guaranteed ever more freedoms! There are no grand declarations about a future of equality or of a happy society. Nor anything else. Here in France, Emmanuel Macron is simply offering young people an immoral dream: to become a billionaire by taking part in the plunder. We are told that there is no future beyond an individual career plan.

But, from our perspective, our political commitment is about the appetite and the need – to live together. This is neither self-sacrifice nor a career path, but real action to develop ourselves and build our future. It is a process in which personal ethics, a political programme and activism all come together. The programme and the action are currently decided within the frame of our public political intervention, as part of La France insoumise. But what about ethics and morality themselves?

There is no poetry without poets, no rebellion without the rebellious, no goodness without the generous of spirit. In general, nothing happens – however improbable it may seem at first – without someone being there to make it happen. The first source of a moral code of responsibility is personal commitment. And to act, you need a reason to act. Where does that come from?

Obviously, it comes from nowhere other than oneself, from one's own determination to act. But why? You have to breathe in order to be. This desire to be ends only with the end of life itself. Yet there is a certain demand for coherence that stands above each of us individually. It demands that we make what we *do* consistent with who we *are*. When we cannot do this, we are sure to feel remorse and regret. But when we can pass this test, we feel satisfied and fulfilled. We would call this hoped-for coherence 'harmony', if we saw it in a bird soaring through the sky, in a river meandering across a plain, in a flower releasing its fragrance, in a note in a piece of music or in a smile on the lips of a loved one. This inner harmony is unachievable if the context makes it impossible. We instinctively know that. Other people are our peers, our fellow human beings. If their needs can be met, then ours can too. The human community is our inorganic being, our body outside our body, our imagination outside our will. It does not just contain us as individual members: we ourselves express this community. This community is just as concrete as the city that binds us together as we use its many networks and connections.

Political good and evil

When we learn to read and write, and connect with large numbers of other people, each human being acquires a taste for individual freedom. By now, the humanist idea that everyone is their own creator has made considerable headway.

The rights that are today being demanded are good proof of this. Even when we do not want them for ourselves, we are now more accepting of the freedom of each individual to make use of them. Indicative in this regard are three fundamental rights of self-determination that are increasingly gaining recognition, at least in some societies. These are the right to

voluntary termination of pregnancy, the freedom to identify as the gender of your own choosing and the right to die when you wish. Even insofar as these issues produce bitter debates, these shifts are testament to movements in the history of ideas and behaviour. What is good for each person endowed with equal rights is good for everyone – even if you do not use that right yourself. No one is forced to have an abortion, or commit suicide, or choose a different gender, just because the law allows for it. Other moral or religious norms that someone has taken up may dissuade them from exercising some freedom that they have gained. But in each case, an equality of rights is the basis of the desirable order of things. Here, freedom of choice turns out to be the surest path towards equality. This connection between freedom and equality gives moral and ethical force to our political efforts.

When we want what is best for everyone, we want what is surely also best for ourselves. The concern to serve the general interest thus provides the basis for the quest for harmony: both the guarantee of its good intentions and the cornerstone of effective political action. We call this quest *virtue.* This has nothing to do with the morality police; rather, it is a political choice.

Virtue is a moral code for the decision that is good both for oneself and for everyone else. But can a political programme also have a moral meaning? Should we want it to? Undoubtedly yes. Every form of social organisation names some things good and others evil. It does this with its laws, but also with the projects that it sets out for the future. To plan something is to want something. And what should we want, if not good itself? Our programme calls for a break with the existing world order. It then names what is good by outlining the ecological and social transition that we need. It does this in a specific enough way to be realistic. But it also makes clear that its intention to bring about a new direction in human history does not lock the future into any preconceived model.

Still, this programme does more than simply boast of its own good intentions. It also points to a political evil. It should not avoid doing so. The world is not careering towards ecological disaster because of some sort of misunderstanding. Finance has no extenuating circumstances when it fails to do its duty in relation to society's needs. Finance cannot be excused when it merely serves its own particular interest, in the absurd, infinite accumulation of capital. Production really is to blame, when it works not to satisfy human needs but to speed up the circulation of money in the cycle of commodities. It is evil when it criminally passes on its social and environmental costs to other people and places. When its greed leads it to deny the fundamental biological needs of our species and of non-humans in the biosphere, that is something evil.

Virtue as civic morality

If virtue is the basis of a civic morality, then we must not shy away from the questions posed by its material practice. Virtue is not a state of being that we could hope to reach, as if it were like climbing a mountain and then staying up there like hermits. Rather, virtue is a path that must continually be built anew. It is the path that we take when we question the consequences of our actions: are they really good for everyone?

Virtue cannot stop at the level of good intentions. If it did, it would turn into something of a totally different nature. It would become hypocrisy, something in which we wrap our mere inability to act. To be something real, it must necessarily be an action, in the here and now. There can be no virtue without the virtuous. Virtue cannot be merely decreed but must be observed in reality. Virtue finds its concrete application in the way in which we live together with others.

Virtue is its own reward and is itself fulfilling. To expect something else in return would hardly be virtuous. It would turn the focus of our actions away from doing what is good and just for everyone.

But virtue is not self-denial or a negation of the self. In its most fundamental principle, it is a quest for reciprocity. The motto of the virtuous would be: ‘What is good for everyone is necessarily good for me.’ I know that my freedom ends where others’ freedom begins, once I can see that others’ freedom ends where my freedom begins.

Virtue is a deliberately chosen and actively practised relation of reciprocity. For this reason, it has to be based on equality. Virtue is impossible wherever one person dominates another. It does not matter whether that domination is based on prejudice or on custom and practice, as patriarchy does through the creed of social one-upmanship – or, worse still, by making people act out of fear of punishment. Equality is the very oxygen of solidarity. Reciprocity means recognising that we each have similar needs to be met.

Virtue is the ability to reconcile the principles that we apply in our own lives with the ones that we would like to see applied to other people, for our common benefit. At a time when our societies are brimming with hatred, virtue is the glue that sticks us together.

Creolisation as a concrete universalism

One development stands out as the most crucial advance of our era: the rise of a single human people, united by its shared fate and its common dependence on the ecosystem. This itself provides the starting point for writing a new narrative about human history. We need to make this the oxygen of our aspiration for a different world order. Humanity is indeed bound together, at the very least by its equal dependence on its ecosystem.

This provides the objective basis for the universality of rights: we all have the same inescapable needs and must have the same right to satisfy them.

If this understanding is correct, then we will also find spontaneous material evidence of it in practice. We could do this simply by noting that there is just one human species, and, indeed, one in which any person can reproduce with any other, whoever they may be. And they do so. We could also make the simple observation that all cultures and languages make demands for freedom and universal equality. Humanity, in the form of large numbers united by their dependence on collective urban networks, is today spreading these realities far and wide.

But a new argument has been raised against this self-evident truth. The ‘clash of civilisations’, based on religious differences, is cited as proof that there are insurmountable divisions cutting through the human species. Humanity is said to be inherently divided, because communities assert their existence by developing different cultures. This is surely a clever way of turning the argument around. Even if *nature* does not create any insurmountable boundary between the various expressions of humanity, perhaps *culture* does create one? We should respond as follows: even looking at this aspect of human life, our species has demonstrated its material unity, indeed in the most concrete terms. We see this in the human tendency to create a common culture out of distinct elements; that is, to practise cultural mixing.

This process has been called ‘creolisation’. The word stems from the creation of a new language in the West Indies and South America: Creole. There, the slaves who had been kidnapped from all over Africa did not speak the same language, either among themselves or with the slaveowners. But communication is fundamental for all social animals. It is a means, but also an end: to produce the social bond without which no human can survive. So these slaves developed a new, common language so that they could communicate. This new connection enabled them to re-enter the

realm of human relations. In the exact moment when their enslavement – their treatment as an object to be owned – denied their humanity, this was how they reasserted it. This is the fundamental significance of creolisation.

Humanity of the many

Creolisation differs from the idea of a ‘mestizo’ society in that it does not necessarily have any biological aspect. It is a purely cultural phenomenon. The concept was coined and given formal definition in the writings of the poet–philosopher Édouard Glissant. But even beyond the particular context that he was writing about, in the West Indies, we can find many other proofs and traces of this process at work. We find it in all languages, which integrate loanwords from some other language, but we can likewise find it in music and rhythms. The same can be said of more private tastes. Whether it is cooking or clothing, creolisation is proof of human universality, because it makes it a reality. From a political point of view, it is the missing link between the desire for universalism and the assertion of the right to be different. It is not a half-and-half but the passage towards something new.

Most creolisation today takes place through music, television series and our know-how in using various objects. These things all allow for a fusion of behaviours and norms. Creolisation makes a mockery of racism. There will never be enough difference between human beings to stop them from combining to produce all manner of new things that they have in common. Creolisation goes beyond the narrow demand for ‘integration’ into some preconceived mould. Rather, it concretely produces the human community in each country. Creolisation is inclusive. No doubt, in each instance, it draws on the dominant culture of a particular time and place. But that doesn’t mean reducing everything to a single norm. Rather, it brings out the

unexpected and the original. It welcomes in and remoulds everything that it comes into contact with.

This tendency is all the more powerful when the pressure of numbers multiplies connections and increases the interactions between people. In such a context, creolisation can be seen as the preparation of a common matrix to build from, or as the foundation of a future cumulative culture. Politically, creolisation offers a perspective for an era of mass population movements in the age of large numbers.

Creolisation does this at a time when climate change is massively increasing the number of human beings on the move. It does this at a time when the intensification of connections in the online noosphere has an unparalleled capacity to produce a common culture of reference. It does this a time when an AI system like Bloom has proven its ability to ‘think’ in forty-six different languages and come up with ‘intelligent’ suggestions. And, finally, it does this at a time when humanity’s expansion into outer space is underlining the existence of a single human community – and beginning to transport it into a boundless universe. Creolisation is the future of a humanity which is soaring to new heights.

Notes

Foreword

1. ‘Extrait du meeting de la NUPES à Toulouse avec Jean-Luc Mélenchon, le mardi 14 juin 2022’, Twitter.
2. Sebastian Budgen, ‘Shrewd Tortoise’, *Sidecar,* 21 April 2022.
3. Jean-Luc Mélenchon, ‘Everyone Should Know: I Am Very Dangerous’, interview by David Broder, *Tribune*, 10 January 2019.
4. Ibid.
5. The name is, however, more elegant when left in French. English-language media often render the name as ‘Unsubmissive France’ or ‘France Unbowed’; yet both sound much more archaic in English than ‘insoumis’ does in French. ‘In revolt’ is more idiomatic but somewhat exaggerates the sense of insurrection rather than withstanding or resisting pressure.
6. See Vincent Martigny, *Dire la France Culture(s) et identités nationales (1981-1995),* Paris: Presses de la Fondation nationale des sciences politiques, 2016, 107ff.
7. ‘En 1983 la parenthèse’, *Le Monde,* 28 October 1995.
8. Jean-Luc Mélenchon, ‘1981, la révolution suspendue’, 10 May 2021, available at YouTube.
9. Ibid.
10. He later recalled ‘the Communists were clearer sighted to say: you are totally mistaken on Maastricht’, and insisted on the need to quit the European treaties. Ibid.
11. Referring to the often tetchy collaboration between a president and a cabinet elected by different means and of different political colours: in this case, Lionel Jospin’s Socialist-led government served under Gaullist president Jacques Chirac.
12. The opposition Parti Socialiste tabled an unsuccessful bill to hold a ratification referendum, but despite the failure of this move, voted in parliament to pass the Treaty.
13. The literature is much too developed to be adequately summarised here, but it is worth noting the existence of a body of work, especially in the vein of Chantal Mouffe and the late Ernesto Laclau, that sets out an explicitly ‘left-populist’ strategy. See Chantal Mouffe, *For a Left*

Populism, London: Verso, 2019. If often said to 'inspire' forces like Podemos and France insoumise, the real relationship seems more complex given the strong influence on Mélenchon's thinking of the French republican tradition and its repertoire of 'popular' reference points.

14. See Pierre Joigneaux, 'Diaboliser Mélenchon, dédiaboliser Le Pen : le jeu terriblement dangereux de Macron', *L'Insoumission*, 29 March 2023. The tendency of Macronist and centre-right media not merely to equate Mélenchon with Le Pen but to suggest that the latter is more 'palatable' intensified after the 7 October attacks in 2023, as Le Pen sided with Israel's war. See 'Stop Using Jews to Launder Marine Le Pen's Image', interview with Simon Assoun, *Jacobin*, 4 July 2024.
15. Mélenchon: 'Populiste, moi? J'assume!', *L'Express*, 16 September 2010, cited in Philippe Marlière, 'Jean-Luc Mélenchon and France Insoumise. The manufacturing of populism', in *The Populist Radical Left in Europe*, London: Routledge, 2019, ebook.
16. Jean-Luc Mélenchon, *L'Autre gauche*, Paris: Éditions Bruno Leprince, 2009.
17. 'Jean-Luc Mélenchon sur le chemin des révolutions citoyennes en Amérique Latine', *L'Insoumission*, 13 July 2022.
18. For an interesting reflection on the unions' relationship to the Gilets Jaunes movement and the reasons for the divide, see Maxime Quijoux and Guillaume Gourgues, 'There Could Be Power in a Union', *Jacobin*, 2 January 2019.
19. For a study of its organisational model and action groups, see Manuel Cervera-Marzal, *Le populisme de gauche – Sociologie de la France insoumise*, Paris: La Découverte, 2021.
20. It was reported that, in the 2017–22 term, La France insoumise's seventeen members of the National Assembly wrote 60,000 amendments, far more than the other groups. See 'Mélenchon's far-left party: five years of opposition at the National Assembly', France24, 4 June 2022, which cites its group president Mathilde Panot: 'Our goal was simple: to be the first opponent and the first proposer. We wanted to fight the government both by bringing the country's various social struggles into the National Assembly while making sure, each time, to propose another vision by converting our programme into legislative proposals. For example, we are the only group that presented a counter-budget every year and a counter-management plan for COVID-19!
21. Roger Martelli, cited in Jean-Numa Ducange, 'Les Adieux à Gauche de Jean-Luc Mélenchon', *La Revue du crieur*, 2018/9, 56.
22. In English, Bruno Amable and Stefano Palombarini, *The Last Neoliberal: Macron and the Origins of France's Political Crisis*, London: Verso, 2021.
23. On the divides within the 'working-class' and 'popular' vote in France in an age of precarity – with specific reference to Le Pen's greater strength among more economically stable, low-education voters – see Yann Le Lann, 'Classes populaires, marchandisation du travail et vote RN', in Ugo Palheta (ed.) *Extrême droite : la résistible ascension*, Paris: Éditions Amsterdam, 2024.
24. As per the in-depth electoral analysis of Julia Cagé and Thomas Piketty, *Une histoire du conflit politique Élections et inégalités sociales en France, 1789-2022*, Paris: Seuil, 2023.

25. On this theme in Mélenchon see David Broder, ‘Cheese, Baguettes, and Victor Hugo’, *Jacobin*, 15 February 2023.
26. Geoffroy Lejeune, ‘Bruno Retailleau au JDD : “Il faut renverser la table en mémoire de Philippine”’, *Le Journal du Dimanche*, 30 September 2024.

Introduction

1. Karl Marx and Friedrich Engels, ‘The Civil War in France’, in *Marx-Engels Collected Works, Vol. 22*, London: Lawrence & Wishart, 1986, p. 334.

1 The Force of Numbers

1. World Trade Organisation, *World Trade Report*, 2013.
2. United Nations Department of Economic and Social Affairs, Population Division, *World Population Prospects 2022: Data Sources* (UN DESA/POP/2022/DC/NO. 9), 2022.
3. Gilles Pison, ‘Huit milliards d’humains aujourd’hui, combien demain?’, *Population et sociétés*, 604, 2022.
4. United Nations Department of Economic and Social Affairs, Population Division, *World Population Prospects 2022*.
5. James C. Scott, *Against the Grain: A Deep History of the Earliest States*, New Haven: Yale University Press, 2017.
6. Carl Sagan, *The Dragons of Eden*, New York: Random House, 1977.
7. UN Department of Economic and Social Affairs, *World Urbanization Prospects*, 2014.
8. Fanny Lopez, *À bout de flux*, Paris: Éditions divergences, 2022.
9. ‘En 2022, un tiers de la population Mondiale n’a toujours pas accès à Internet’, *Le Monde*, 17 September 2022.

2 The New Space–Time

1. On 13 October 1967, the Third General Conference on Weights and Measures decided to redefine the time unit of the International System of Units, namely the second.
2. E. Cordina-Duverger, M. Houot, N. Tvardik, M. El Yamani, C. Pilorget and P Guénel, ‘Prévalence du travail de nuit en France: Caractérisation à partir d’une matrice emplois-expositions’, *Bulletin épidémiologique hebdomadaire*, 8–9, 2019, 168–74.
3. See ‘La vie des poules pondeuses’, at l214.com.

4. J. J. DiNicolantonio, James H. O'Keefe and William L. Wilson, 'Sugar addiction: is it real? A narrative review', *British Journal of Sports Medicine*, 52 (14), 2018, 910–13.
5. 'WHO European Regional Obesity Report 2022', 2 May 2022, at who.int.
6. NCD Risk Factor Collaboration, 'Worldwide trends in underweight and obesity from 1990 to 2022', *Lancet*, 29 February 2024.
7. Médécins sans frontières, 'Defeating the Double Standard in Diabetes Care', 8 May 2024, at msfaccess.org.
8. Pew Charitable Trusts and SYSTEMIQ, *Breaking the Plastic Wave*, 23 July 2020.
9. Food and Agriculture Organization of the United Nations, *Status of the World's Soil Resources*, main report, 2015.
10. *Sagascience*, at cnrs.fr.
11. Halte à l'obsolescence programmée, *Petit écran, grand gaspillage: L'obsolescence des téléviseurs*, June 2021 report, at halteobsolescence.org.
12. Global e-Waste Monitor 2024: Electronic Waste Rising Five Times Faster than Documented E-waste Recycling. Unitar, UIT, 20 March 2024.
13. Oxfam France, *Fast Fashion: Impacts, alternatives et moyens d'agir*, March 2022, at oxfamfrance.org.
14. Ademe, *Revers de mon look: Quels impacts ont mes vêtements et mes chaussures sur la planète?*, 2022, at librairie.ademe.fr.
15. Environmental Protection Agency (EPA), *Facts and Figures about Materials, Waste and Recycling*, 2018 report.
16. European Parliament, *The Impact of Textile Production and Waste on the Environment (Infographics)*, at europarl.europa.eu.
17. Agence nationale pour la gestion des déchets radioactifs (Andra).

3 The Age of Uncertainty

1. United Nations Environment Programme, *Frontiers 2022: Noise, Blazes and Mismatches* (2022 report).

4 The Noosphere

1. Vladimir I. Vernadsky, 'The biosphere and the noosphere', *American Scientist*, January 1945, 1–12.
2. Pierre Teilhard de Chardin, *Le phénomène humain*, Paris: Seuil, 1955.
3. Vincent Glavieux, 'Des documents stockés sur ADN entrent aux Archives nationales', *Sciences d'avenir*, 30 November 2011.

4. Cecilia Rikap and Bengt-Åke Lundvall, ‘Big tech, knowledge predation and the implications for development’, *Innovation and Development*, 12 (3), 2022, 389–416.
5. See ‘Introducing OpenAI’, at openai.com.
6. On this subject see Éric Berr, *L’Intégrisme économique*, Paris: Les Liens qui libèrent, 2017.
7. Fabienne Orsi and Jean-Paul Moatti, ‘D’un droit de propriété intellectuelle sur le vivant aux firmes de génomique: Vers une marchandisation de la connaissance scientifique sur le génome humain’, *Économie & prévision*, 150 (4), 2001, 123–38.
8. On the capitalist monopolisation of intellectual property see Cédric Durand, *How Silicon Valley Unleashed Techno-feudalism: The Making of the Digital Economy*, London: Verso, 2024.

5 Our Involuntary Servitude

1. Commissariat général au développement durable, *L’évaluation française des écosystèmes et des services écosystémiques* (Efese), 8 April 2021.
2. Yinon M. Bar-On, Rob Phillips and Ron Milo, ‘The biomass distribution on Earth’, *PNAS*, 115 (25), 2018, 6506–11.
3. CCFDTerre Solidaire, BASIC and POLLINIS, *Pesticides: Un modèle qui nous est cher* (report), 2022, at ccfd-terresolidaire.org.
4. Razmig Keucheyan, *Les besoins artificiels*, Paris: Zones, 2019.
5. Emily Elhacham, Liad Ben-Uri, Jonathan Grozovski, Yinon M. Bar-On and Ron Milo, ‘Global human-made mass exceeds all living biomass’, *Nature*, 588, 2020, 442–4.
6. Translator’s note: In French, the term *libéral* does not have the same connotation of ‘progressive’ as in US political discourse, and emphasises free-market economics, not democracy or diversity. Early in Macron’s presidency, some left-wing critics cast him as a ‘progressive neoliberal’ in the sense meant by Nancy Fraser. In practice, and as noted by the author here, his government has proven markedly more conservative than his 2017 campaign promised, and it might be added that the ‘free-marketeer’ cutting of public services as well as wealthier households’ taxes has been combined with more ‘interventionist’ approaches, for instance in response to the COVID-19 pandemic and the war in Ukraine.
7. Grégoire Chamayou, *The Ungovernable Society: A Genealogy of Authoritarian Liberalism*, Cambridge: Polity Press, 2021.
8. Anne-Laure Delatte, *L’État droit dans le mur*, Paris: Fayard, 2023.
9. Bruno Amable and Stefano Palombarini, *The Last Neoliberal: Macron and the Origins of France’s Political Crisis*, London: Verso, 2021.
10. IPCC, *Synthesis Report for the Sixth Assessment Report*, 20 March 2023.
11. Johan Rockström et al., ‘Safe and just earth system boundaries’, *Nature*, 619, 2023, 102–11, at doi.org/10.1038/s41586-023-06083-8.
12. Andreas Malm, lecture in his role as chair of geography at the Institut La-Boétie, 23 March 2023.

13. Figures given during a lecture by Andreas Malm in his role as a chair in geography at the Institut La Boétie, 23 March 2023.
14. AHIP, ‘New Study: In the Midst of COVID-19 Crisis, 7 out of 10 Big Pharma Companies Spent More on Sales and Marketing than R&D’, 27 October 2021, at ahip.org.
15. Hervé Kempf, *Comment les riches détruisent la planète*, Paris: Seuil, 2007.
16. Tim Gore, *Carbon Inequality in 2030*, Oxfam report, 5 November 2021.
17. Bruno Villalba, ‘L’écologie politique face au délai et à la contraction démocratique’, *Écologie et politique*, 40 (2), 2010, 95–113.
18. Tiffany H. Morrison, W. Neil Adger, Arun Agrawal, Katrina Brown, Matthew J. Hornsey, Terry P. Hughes, Meha Jain, Maria Carmen Lemos, Lucy Holmes McHugh, Saffron O’Neill and Derek van Berkel, ‘Radical interventions for climate-impacted systems’, *Nature Climate Change*, 12, 2022, 1100–6, available at https://doi.org/10.1038/s41558-022-01542-y.

6 The Rights of the Species

1. Fabio Falchi et al., ‘The new world atlas of artificial night sky brightness’, *Science Advances*, 2 (6), 10 June 2016, available at science.org.
2. Christopher C. M. Kyba, Yiğit Öner Altıntaş, Constance E. Walker and Mark Newhouse, ‘Citizen scientists report global rapid reductions in the visibility of stars from 2011 to 2022’, *Science*, 379, 2023, 265–8, DOI:10.1126/science.abq778.
3. Philippe Atlan, ‘Travail de nuit et risque de cancer’, *Anses: Bulletin de veille scientifique*, 15, July 2011, at bvs.anses.fr.
4. UNESCO, 'Declaration on the Responsibilities of the Present Generations Towards Future Generations', 12 November 1997, available at unesco.org.
5. ‘World Migratory Bird Day illuminates the dark side of light pollution’, *UN News*, 13 May 2022.
6. Bernie Krause, *The Great Animal Orchestra: Finding the Origins of Music in the World’s Wild Places*, New York: Little Brow, 2012.
7. Rachel Carson, *Silent Spring*, London: Penguin 2020 [1962].
8. Conseil national du bruit commission santé environnement, ‘Les effets sanitaires du bruit’, September 2017.
9. Global Health Estimates 2019, WHO.
10. European Environment Agency, ‘Environmental noise in Europe – 2020’, EEA Report, 22/2019, 5 March 2020; Monica S. Hammer, Tracy K. Swinburn and Richard L. Neitzel, ‘Environmental Noise Pollution in the United States: Developing an Effective Public Health Response’, *Environmental Health Perspectives*, 122 (2), 5 December 2013, 115–19.
11. Studies by the Centre de recherche pour l’étude et l’observation des conditions de vie (CRÉDOC) for Bruitparif, 2016 and 2022: for the latter study, see Patricia Croutte, ‘Perception du bruit en Ille-de-France fin 2021 – Rapport’, *CRÉDOC*, June 2022, at credoc.fr.

12. National Institute for Occupational Safety and Health (NIOSH), ‘About Occupational Hearing Loss’, CDC, 18 January 2024.
13. Richard L. Neitzel et al., ‘Toward a better understanding of nonoccupational sound exposures and associated health impacts: Methods of the Apple Hearing Study’, *J Acoust Soc Am.* 151 (3), March 2022, 1476–89.
14. See *Légifrance*, at legifrance.gouv.fr.
15. UN Environment Programme Report 2022: *Frontiers 2022: Noise, Blazes and Mismatches.*
16. ‘New environmental report offers solutions for “triple planetary crisis”’, *UN News*, 17 February 2022.
17. Lancet Commission on Pollution and Health, *Pollution and Health: A Progress Update*, May 2022.
18. Lucie Laurian and Richard Funderburg, ‘Environmental justice in France? A spatio-temporal analysis of incinerator location’, *Journal of Environmental Planning and Management*, 57, 3, 2014, 424–46.
19. OFCE, *La mesure du coût économique et social du mal-logement*, 2015.
20. AtmoSud, *Quelle qualité de l’air pour les riverains des ports de Nice et Marseille*, 2018.
21. See Greenpeace, ‘Marseille : 58% des écoles et des crèches cernées par la pollution de l’air’, 28 March 2019, at greenpeace.fr.
22. Association respire, *Carte scolaire de la pollution de l’air en Île-de-France*, March 2019.
23. According to a 2021 report by the NGO Transport et environnement.
24. European Environment Agency, ‘European waters: Assessment of status and pressures 2018’ at eea.europa.eu/publications/state-of-water.
25. Alternatives économiques, *La sécheresse, terreau de révolutions*, May 2023.
26. Birgit Bednar-Friedl, Robbert Biesbroek and Daniela N. Schmidt, ‘Europe’, in *Climate Change 2022: Impacts, Adaptation and Vulnerability*, Cambridge, UK: Cambridge University Press, 1833, available at ipcc.ch.
27. FAO, IFAD, UNICEF, WFP and WHO, ‘In Brief’, in *The State of Food Security and Nutrition in the World 2024*, Rome: FAO, 2024, available at openknowledge.fao.org.
28. *The State of Food Security and Nutrition in the World*, a report by five UN bodies: the Food and Agriculture Organization, the World Food Programme, the International Fund for Agricultural Development, the World Health Organization and UNICEF.
29. Bénédicte Bonzi, *La France qui a faim: Le don à l’épreuve des violences alimentaires*, Paris: Seuil, 2023.
30. Ademe et al., ‘Mieux manger, moins gaspiller, moins polluer’ (April 2022), at multimedia.ademe.fr.
31. UFC-Que choisir, *Évaluation additifs alimentaires.*
32. WHO, *European Regional Obesity Report*, 2022; WHO, *Global Report on Diabetes*, 2021.
33. Hagai Levine et al., ‘Temporal trends in sperm count: a systematic review and meta-regression analysis of samples collected globally in the 20th and 21st centuries’, *Human Reproduction Update*, 29 (2), March–April 2023, 157–76, available at academic.oup.com.
34. ‘State of Homelessness: 2024 Edition’, endhomelessness.org.

35. Emmanuel Macron, *Révolution*, Paris: Xo, 2016.

7 The City

1. UN-Habitat, *State of the World's Cities 2008/2009 – Harmonious Cities*, report available online at sdgs.un.org.
2. Johannes Müller, Wiebke Kirleis and Robert Hofmann, 'Des métropoles en Europe il y a 6 000 ans', *Pour la science*, 521, 8 March 2021.
3. Alain Testart, *Les chasseurs-cueilleurs ou l'origine des inégalités*, Paris: Gallimard, 2022 [1982].
4. Yuval Noah Harari, *Sapiens: A Brief History of Humankind*, London: Harville Secker, 2014.
5. David Harvey, *Paris, Capital of Modernity*, London: Routledge, 2006.
6. Allan Popelard and Paul Vannier, 'Capital designs a dream city', *Le Monde diplomatique*, July 2015; Elizabeth Rush, 'How not to grow a new town', *Le Monde diplomatique*, September 2013.
7. Antoine Salles-Papou, *Les communes libres*, Lons-le-Saunier: Éditions 2031, 2020.
8. Henri Lefebvre, 'The right to the city', in *Writings on Cities*, Oxford: Blackwell, 2017.

8 Networks

1. Mathieu Quet, *Flux: Comment la pensée logistique gouverne le monde*, Paris: La Découverte, 2022, 12.
2. Nicolas Curien, *Économie des réseaux*, Paris: La Découverte, 2005.
3. Vincent Jarousseau, 'Se déplacer', in Gregory Rzepky, Allan Popelard and Anthony Burlaud (eds), *Le nouveau monde: Tableau de la France néolibérale*, Paris: Amsterdam, 2021, 631.
4. Ibid.
5. David Pontille and Jérôme Denis, *Le soin des choses: Politiques de la maintenance*, Paris: La Découverte, 2022, p. 101.
6. See the report *Drought in Europe: August 2022*, by experts from the European Commission's Joint Research Centre, at publications.jrc.ec.europa.eu.
7. See Cécile Gintrac's preface in David Harvey, *Géographie de la domination: Capitalisme et production de l'espace*, Paris: Éditions Amsterdam, 2018.
8. Calculation based on INSEE figures.
9. Calculation based on OECD figures.
10. Carlotta Benvegnù and David Gaborieau, 'Les mondes logistiques: De l'analyse globale des flux à l'analyse située des pratiques de travail et d'emploi', *Travail et emploi*, 162 (3), 2020, 5–22.

11. Ibid.
12. Thibault Vetter, ‘La CFDT Alsace change de méthode : “Si on se coordonne avec l’intersyndicale, on peut tout paralyser”’, *Rue89 Strasbourg*, 14 April 2023.

9 The People

1. *Survival of the Richest*, Oxfam annual report on inequality, January 2023.
2. *Profiting from Pain*, Oxfam report, May 2022.
3. Julia Cagé, *Sauver les médias: Capitalisme, financement participatif et démocratie*, Paris: Seuil, 2022.
4. Autorité de régulation de la communication audiovisuelle et numérique (Arcom), *Rapport sur la représentation de la diversité dans les médias audiovisuels*, 2022.
5. Maurice Godelier, *Communauté, société, culture: Trois clefs pour comprendre les identités en conflits*, Paris: CNRS, 2009.
6. Jean Jaurès, ‘Civilisation et socialisme’, in *Discours en Amérique latine*, Paris: Bruno Leprince, 2010 [1911].
7. Figures from the Haute autorité pour la transparence de la vie publique (HATVP).
8. Figures from the EU’s transparency register.

10 The Grain of Sand

1. Per Bak and Kan Chen, ‘Les systèmes critiques auto-organisés’, *Pour la science*, 161, March 1991, 52–60.
2. Jean-Marc Salmon, *29 jours de révolution: Histoire du soulèvement tunisien (17 décembre 2010–14 janvier 2011)*, Paris: Les Petits Matins, 2016.
3. Giorgio Parisi, *Comme un vol d’étourneaux*, Paris: Flammarion, 2022, p. 33.
4. Ibid.
5. James Gleick, *Chaos: Making a New Science*, New York: Viking Books, 1987.
6. Kathryn A. Lee and Christopher R. Friese, ‘Deaths by Suicide among Registered Nurses: A Rapid Response Call’, *Journal of Psychosocial Nursing and Mental Health Services*, 59 (8): 3–4, 1 August 2021.
7. Daniel S. Lawrence and Jessica Dockstader, ‘Law Enforcement Deaths by Suicide’, Arlington, VA: CAN Corporation, March 2024.
8. Cora Peterson et al., ‘Suicide Rates by Major Occupational group – 17 States, 2012 and 2015’, *Morbidity and Mortality Weekly Report*, 67 (45): 1253–60, 16 November 2018.
9. ‘Preventing suicide in Lebanon’: infographic by the Lebanese health ministry, World Health Organization Lebanon, embrace and the Agence française de développement, at moph.gov.lb.

10. World Health Organization, Global Health Observatory Data Repository.
11. Data collected by India's National Crime Records Bureau (NCRB).

11 The Revolution's New Clothes

1. Blaise de Monluc, *Commentaires 1521–1675: Chroniques des guerres de religion,* Paris: Gallimard, 1964.
2. Éric Hazan, *La barricade: Histoire d'un objet révolutionnaire,* Paris: Autrement, 2013.
3. Lucien Jerphagnon, *Julien dit l'Apostat,* Paris: Tallandier, 2008.
4. Jean Jaurès, *Discourse en Amérique latine 1911,* Paris: Bruno Leprince, 2010 [1911].
5. Figures from the Red Chilena Contra la Violencia hacia las mujeres.
6. Karl Laske, 'À Nantes, quatre étudiantes qui manifestaient accusent la police de violences sexuelles', *Mediapart,* 18 March 2023.
7. Karl Laske, 'À Nantes, quatre étudiantes qui manifestaient accusent la police de violences sexuelles', *Médiapart,* 18 March 2023.
8. *Unesco Gender Review,* 2016, and *Unesco Global Monitoring Report on Education for All,* 2012, available at right-to-education.org.
9. FAO, *The Status of Women in Agrifood Systems,* Rome: FAO, 2023, available at fao.org.
10. Fanny Godet, 'Écart de salaire entre femmes et hommes en 2022', Insee, 3 May 2024, at insee.fr.
11. Cinzia Arruzza, Tithi Bhattacharya and Nancy Fraser, *Feminism for the 99%: A Manifesto,* London: Verso, 2019.

12 Networked Capitalism

1. Cédric Durand, *How Silicon Valley Unleashed Techno-feudalism: The Making of the Digital Economy,* London: Verso, 2024.
2. Oxfam France, *Banques, la faim leur profite bien! Réforme bancaire: Ces banques françaises qui spéculent sur la faim,* report, 12 February 2012.
3. World Bank, market capitalisation of listed companies (current US$).
4. IMF figures.
5. Ibid.
6. 'Avis no. 14–A–13 du septembre 2014 sur le secteur des autoroutes après la privatisation des sociétés concessionaires', Autorité de la concurrence, 18 September 2014.
7. 'Baromètre annuel énergie-info', Le médiateur national de l'énergie, 12 October 2021.
8. Éric Berr, Aurélie Trouvé, Raul Sampognaro, Sylvain Billot and Jonathan Marie, 'Inflation: la lutte des classes par les prix', Institut La-Boétie, 2022.

9. Durand, *How Silicon Valley Unleashed Techno-feudalism.*
10. Laura Kabelka, ‘EU aims to tackle threats to submarine data cables’, *Euractiv,* 6 October 2022.
11. Service Infographie (of *Le Figaro*) ‘Guerres de l’eau: les 12 points de tension à travers le monde’, *Le Figaro,* 18 August 2022.

13 An Alter-globalising Diplomacy

1. ‘Remarks by national security advisor Jake Sullivan on renewing American economic leadership at the Brookings Institution’, 27 April 2023, at white-house.gov.
2. ‘Future of the human climate niche’, *Proceedings of the National Academy of Sciences,* October 2019.
3. NOAA, *2022 Sea Level Rise Technical Report.*
4. International Campaign to Abolish Nuclear Weapons (ICAN), *Des Conséquences humanitaires catastrophiques*, 2012.
5. ‘Humanity “one misunderstanding, miscalculation away from nuclear annihilation”, secretary-general warns as Non-proliferation Treaty review conference begins’, 1 August 2022, at press-un.org.
6. Dr Nan Tian et al., ‘Trends in World Military Expenditure, 2022’, Stockholm International Peace Research Institute, 24 April 2023.
7. IMF figures.
8. World Bank and IMF figures.
9. ‘Address by NDB President, Dilma Rousseff at Presidential Visit and Inauguration Ceremony’, 14 April 2023, at ndb.int.
10. Estimates by Anne-Laure Kiechel, founder of the French consulting firm Global Sovereign Advisory (GSA), which specialises in matters of sovereign debt.
11. World Bank, *Groundswell*, report, September 2021.
12. UNESCO and UN-Water, *World Water Development Report 2023*, 2023.
13. According to the International Organization for Migration (IOM)’s Missing Migrants Project (https://missingmigrants.iom.int/), on 28 July 2024 the number of people who had been counted dead or missing in the Mediterranean since 2014 reached 30,002.

14 Humanity’s New Frontiers

1. Lucius Annaeus Seneca, ‘Medea’, in *Seneca in Ten Volumes*, volume 8, Cambridge, MA: Harvard University Press, 1972, 255 ff.
2. Estimation by the global inequalities lab at the École d’économie de Paris.

3. Marit Undseth, Claire Jolly and Mattia Olivari, ‘Space sustainability: The economics of space debris in perspective’, *OECD Science, Technology and Industry Policy Papers*, 87, 8 April 2020.
4. African Aeronautics and Space Organisation (AASO) figures, 2023.
5. ‘Ocean plastic pollution to quadruple by 2050, pushing more areas to exceed ecologically dangerous threshold of microplastic concentration’, WWF, 8 February 2022.
6. UICN (Union internationale pour la conservation de la nature).
7. European Commission figures, 2015.
8. Figures from the Organisation maritime internationale (OMI).
9. IBPES, *Global Assessment Report on Biodiversity and Ecosystem Services*, February 2020.
10. Offshore Technology, *North Field East Project, Qatar*, 26 July 2022.
11. EU Parliament, ‘Plastic in the ocean: the facts, effects and new EU rules’, 11 November 2023, at europa.eu.
12. A. Baccini, W. Walker, L. Carvalho, M. Farina, D. Sulla-Menashe and R. A. Houghton, ‘Tropical forests are a net carbon source based on aboveground measurements of gain and loss’, *Science*, 358, 2017, 230–4, at https://doi.org/10.1126/science.aam5962.
13. L. Lebreton et al., ‘Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic’, *Scientific Reports*, 8, 2018, article number 4666, at https://doi.org/10.1038/s41598-018-22939-w.
14. IPCC, *Sixth Assessment Report*, Part Two.
15. Institut de la francophonie pour le développement durable, *Fiche Prisme no. 15 sur les Énergies marines*, 2021.
16. World Energy Council figures, 2022.
17. International Energy Agency (IEA) figures, 2022.

Conclusion

1. Roland J. L. Breton, ‘Notre Avenir à tous, rapport de la C.M.E.D. (la Commission mondiale sur l’environnement et le développement)’, *Annales de géographie*, 559, 1991, 363. For the original report see World Commission on Environment and Development, *Our Common Future*, at sustainablede-velopment.un.org.
2. Jean-Luc Mélenchon, *À la conquête du chaos*, Paris: Denoël, 1991.
3. Gauthier Chapelle and Pablo Servigne, *L’entraide: L’autre loi de la jungle*, Paris: Les Liens qui libèrent, 2017.

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